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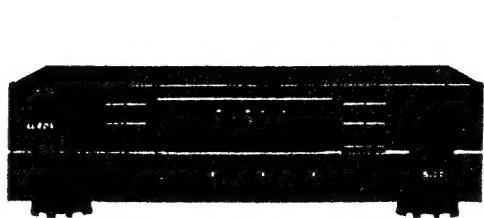
Hi-Fi AM-FM Stereo Reciever

SERVICE MANUAL

MODEL DRA-565RD MODEL DRA-365RD

AM-FM STEREO RECIEVER

For EUROPEAN
And U.K Models



DRA-565RD



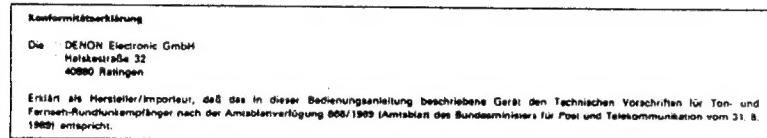
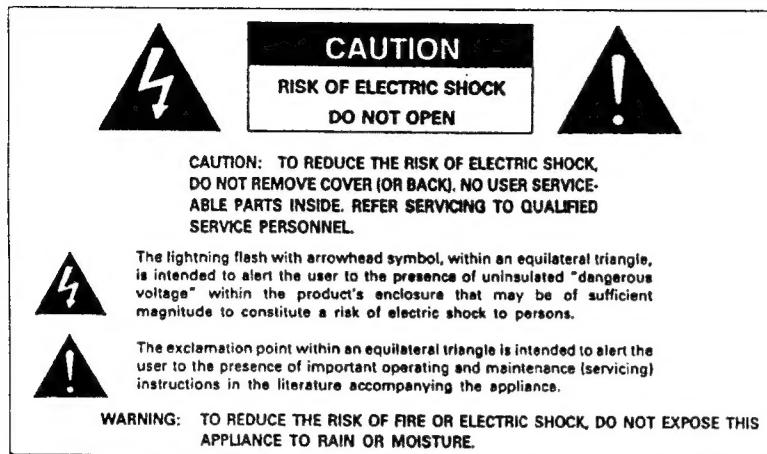
DRA-365RD



TABLE OF CONTENTS

OPERATING INSTRUCTIONS	2 ~ 9
DISASSEMBLY	10, 11
METHOD OF ADJUSTMENTS	12
CONNECTION DIAGRAM OF MEASURING INSTRUMENTS	13
SEMICONDUCTORS	13 ~ 16
BLOCK/LEVEL DIAGRAM (DRA-565RD)	17
BLOCK/LEVEL DIAGRAM (DRA-365RD)	17
NOTE ON PARTS LIST	18
PRINTED WIRING BOARD PARTS LIST (DRA-565RD)	18, 19
PRINTED WIRING BOARD PARTS LIST (DRA-365RD)	19, 20
PRINTED WAIRING BOARD PATTERNS	21 ~ 23
1U-2731B MAIN UNIT (DRA-565RD)	21
1U-2731 MAIN UNIT (DRA-365RD)	22
1U-2732B TUNER & DISPLAY UNIT (DRA-565RD)	23
1U-2732 TUNE & DISPLAY UNIT (DRA-365RD)	24
WIRING DIAGRAM	25
EXPLODED VIEW OF CHASSIS AND CABINET (DRA-565RD)	26
PARTS LIST OF EXPLODED VIEW (DRA-565RD)	27
PARTS LIST OF EXPLODED VIEW (DRA-365RD)	28
EXPLODED VIEW OF CHASSIS AND CABINET (DRA-365RD)	29
SCHEMATIC DIAGRAM (for DRA-565RD)	31
SCHEMATIC DIAGRAM (for DRA-365RD)	32

NIPPON COLUMBIA CO., LTD.



PRECAUTIONS FOR INSTALLATION
Install DRA-565/365RD always horizontally. And leave at least 10 cm of space between this unit and other component placed above.

VORKEHRUNGEN FÜR DIE AUFSTELLUNG
Der DRA-565/365RD ist stets waagerecht aufzustellen. Außerdem muß ein Mindestabstand von 10 cm zwischen diesem Gerät und der Komponente gewährleistet werden, die darüber gestellt wird.

PRÉCAUTIONS D'INSTALLATION
Le DRA-565/365RD doit toujours être installé horizontalement. Et laisser au moins un espace de 10 cm entre cet appareil et l'autre composant placé au-dessus.

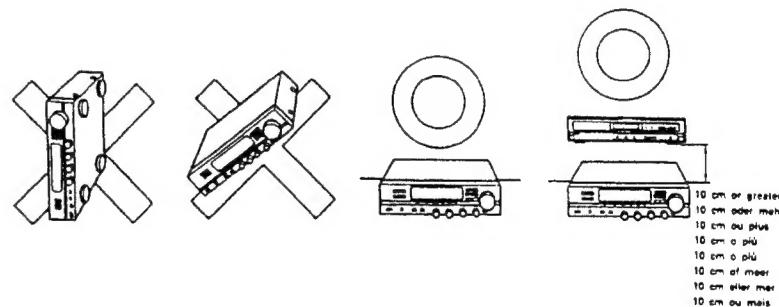
PRECAUZIONI PER L'INSTALLAZIONE
Il DRA-565/365RD viene sempre installato in modo orizzontale. Lasciate uno spazio di almeno 10 cm tra quest'unità e un eventuale componente sovrapposto.

PRECAUCIONES PARA LA INSTALACION
Instale siempre al DRA-565/365RD en posición horizontal. Asegúrese también de dejar un espacio de por lo menos 10 cm entre esta unidad y el componente que sea colocado encima.

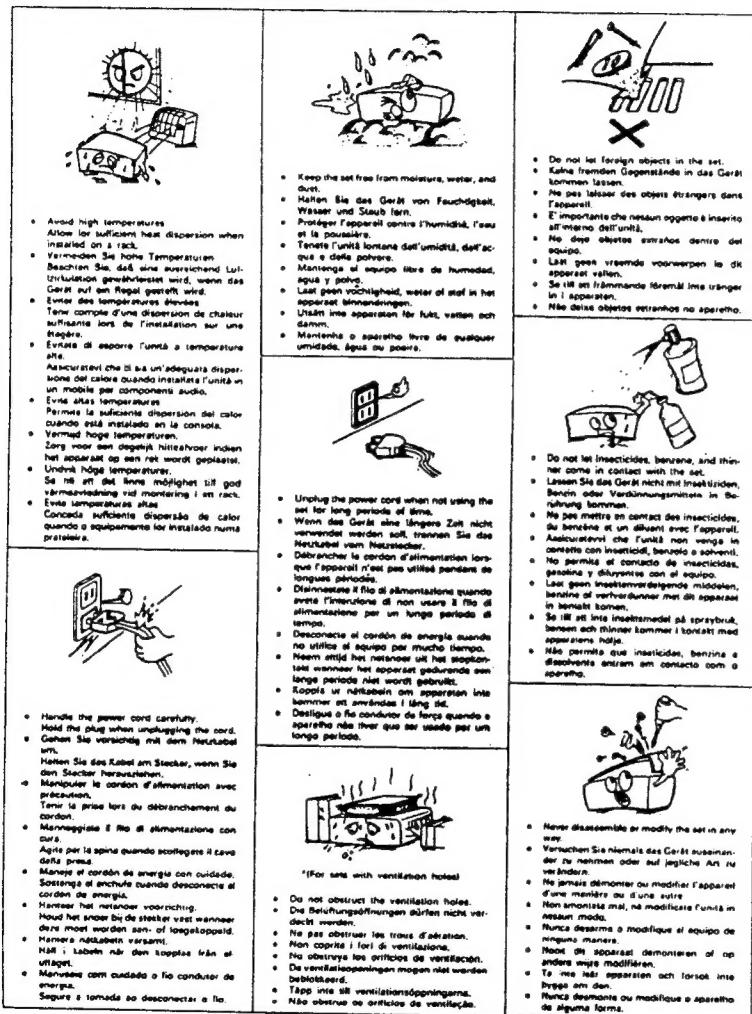
VOORZORGSMAASTREGELLEN VOOR INSTALLATIE
De DRA-565/365RD altijd horizontaal plaatseen. En minstens 10 cm ruimte laten tussen dit toestel en het andere komponent dat u erboven plaatst.

FÖRBEREDELSEER FÖR INSTALLATION
Installera alltid DRA-565/365RD horisontellt. Lämna åtminstone 10 cm mellan denna apparat och en annan komponent som placeras ovanpå.

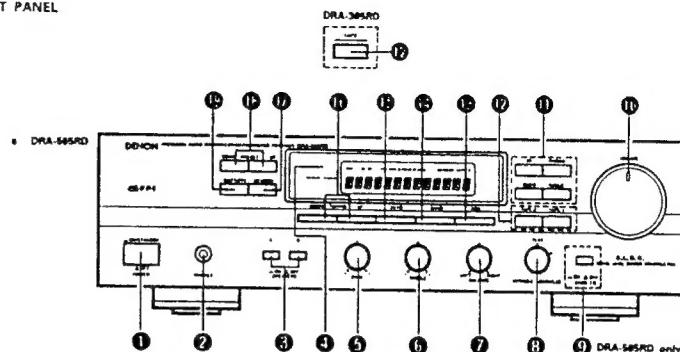
PRECAUÇÕES PARA A INSTALAÇÃO
Instale sempre horizontalmente o DRA-565/365RD. E deixe pelo menos 10 cm de espaço entre esta unidade e o outro componente colocado acima.



NOTE ON USE/HINWEISE ZUM GEBRAUCH/OBSERVATIONS RELATIVES A L'UTILISATION
NOTE SULL'USO/NOTAS SOBRE EL USO/ALVORENS TE GEBRUIKEN/OBSERVERA
OBSERVAÇÕES QUANTO AO USO



FRONT PANEL



Please check the following items are included with the main unit in the carton:

(1) Operating Instructions	1
(2) AM Loop Antenna	1
(3) FM Antenna	1
(4) Remote Control RC-174	1
(5) Batteries R6 (AA)	2

Bitte überprüfen Sie, ob die folgenden Teile vollständig in der Verpackung enthalten sind:

(1) Bedienungsanleitung	1
(2) AM-Rahmenantenne	1
(3) UKW-Antenne	1
(4) Fernbedienungsgerät RC-174	1
(5) Trockenzelle-Batterie R6 (AA)	2

Veuillez contrôler que les articles suivants sont bien joints à l'appareil principal dans le carton:

(1) Mode d'emploi	1
(2) Antenne-cadre AM	1
(3) Antenne FM	1
(4) Télécommande RC-174	1
(5) Piles de format R6 (AA)	2

Controllate che le parti seguenti si trovino imballate con l'apparecchio nella scatola di spedizione.

(1) Istruzioni per l'uso	1
(2) Antenna AM a telaio	1
(3) Antenna FM	1
(4) Telecomando RC-174	1
(5) Batteria a secco R6 (AA)	2

Por favor verifique que los siguientes artículos son empacados en la caja para separados de la unidad principal.

(1) Instrucciones de operación	1
(2) Antena AM de cuadro	1
(3) Antena de FM	1
(4) Unidad de control remoto RC-174	1
(5) Pilas secas R6 (AA)	2

Kontrollera om de följande tillbehör har packats ner i kartongen tillsammans med huvudenheten.

(1) Bruksanvisning	1
(2) AM-räramtenn	1
(3) FM-antenn	1
(4) Afstandsbediening RC-174	1
(5) R6 (AA) droge cel batteri!	2

Kontrollera att följande tillbehör har packats ner i kartongen tillsammans med huvudenheten.

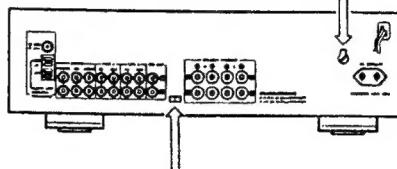
(1) Brugsanvisning	1
(2) Ramantenn för AM-brut	1
(3) FM-antenn	1
(4) Fjärrkontroll RC-174	1
(5) R6 (AA) torrbatteri	2

Certifique-se de que as seguintes peças estão incluídas na embalagem fora da unidade principal:

(1) Instruções de operação	1
(2) Antena de quadro AM	1
(3) Antena FM	1
(4) Controle remoto RC-174	1
(5) Pilhas R6 (AA)	2

For multi-voltage models only:

- The desired voltage may be set with the VOLTAGE SELECTOR KNOB on the rear panel, using a screwdriver.
- Do not twist the VOLTAGE SELECTOR KNOB with excessive force as this may damage the switch.
- If the VOLTAGE SELECTOR KNOB does not turn smoothly, please contact a qualified serviceman.



(The voltage is set to 220 V upon shipment from the factory.)

FREQUENCY STEP (Frequency step switch)
Set the FREQUENCY STEP switch as described below.
a. In the U.S.A. and Canada - set the switch to 100 kHz / 10 kHz side.
With this setting, the frequency varies in 100 kHz steps in the range of 87.5 to 108.0 MHz (FM) and in 10 kHz steps in 520 to 1710 kHz (AM).
b. Elsewhere - set the switch to 50 kHz / 5 kHz side.
With this setting, the frequency varies in 50 kHz steps in the range of 87.50 to 108.0 MHz (FM) and in 5 kHz steps in 522 to 1611 kHz (AM).

DESIGNATIONS AND FUNCTIONS OF PANEL CONTROLS (Refer to Page 5.)

FRONT PANEL

① POWER (Power ON-STANDBY/OFF Switch)

This switch turns the unit ON or OFF. There is a delay of approximately 3 seconds before the unit will operate after this power switch is turned ON. If the unit is turned OFF from the remote control, the unit will be in the STANDBY mode. When in the STANDBY mode, the unit can be turned ON with the power button on the remote control. If the unit will not be used for extended period, be sure to turn the unit OFF from the front panel power switch.

NOTE: This unit includes a STANDBY protection feature. This feature is designed to prevent accidental turn-on from the STANDBY mode in the event of a power failure. Should AC power be disconnected and then reconnected when the unit is in STANDBY mode, the unit will return to the STANDBY mode.

To turn the unit ON from the STANDBY mode without the remote control, operate the front panel power switch four times. The unit will then operate normally.

② PHONES (Headphones jack)

Connect a pair of headphones (sold separately) to this jack for private listening.

③ SPEAKERS (Speaker selector switches)

These switches are used to select speaker system A and B. No sound is heard through the speakers when both switches are reset to the (—) position.

④ REMOTE SENSOR (Remote control sensor)

This sensor receives the infra-red light transmitted from the wireless remote control unit.

For remote control, point the wireless remote control unit towards the sensor.

⑤ BASS (Bass control)

Use this control to adjust the low-range response. When the control is set to the center position, the frequency characteristic curve (below 1,000 Hz) is flat. Turn the control clockwise to increase the bass response and counter-clockwise to decrease it.

⑥ TREBLE (Treble control)

Use this control to adjust the high-range response. When the control is set to the center position, the frequency characteristic curve (above 1,000 Hz) is flat. Turn the control clockwise to increase the treble response and counter-clockwise to decrease it.

⑦ BALANCE (Balance control)

Use this control to balance the volume levels between left and right channels. The volume levels in both channels are equal when the control is set to the center position.

⑧ VARIABLE LOUDNESS (Loudness control)

At low volumes, the human ear is less sensitive to low (BASS) and high (TREBLE) frequencies. Use this control to compensate for this deficiency when listening at low volume levels. Turn this control counter-clockwise until a natural balance of bass and treble sound has been restored.

⑨ BASS EQ (DRA-565RD only)

Press this button to switch the BASS EQ ON (—) for emphasis of bass sounds.

Use in conjunction with the bass adjustment of the tone control will provide further emphasis of bass sounds. Set this switch to OFF (—) when you wish to listen with a normal setting condition.

⑩ VOLUME (Volume control)

This knob is used to adjust the volume level of both channels.

Turn the knob clockwise to raise the volume and counter-clockwise to lower it.

⑪ Input selector (Input selector buttons)

These buttons are used to select the audio input source.

- PHONO: Press to play a record on a record player connected to the PHONO input jacks.
- CD: Press to listen to a compact disc player or another component connected to the CD input jacks.
- TUNER: Press to listen to FM or AM programs.
- VIDEO: Use when playing back the audio from a Hi-Fi video, video disc player or other component connected to the VIDEO terminal.

⑫ Tape selector (Tape selector/monitor buttons) (DRA-565RD)

TAPE-1: Press this button once, TAPE-1 indicator will light up and then you can play tape source on TAPE-1 terminal. In this state you can copy TAPE-1 source to TAPE-2 terminal.

TAPE-2: Press this button once, TAPE-2 indicator will light up and then you can play tape or video source of TAPE-2 terminal.

Press again the button currently accessed, to play sources selected by input selector ⑪, indicator goes out.

⑬ TAPE (Tape monitor button) (DRA-365RD)

Press this button once, TAPE indicator will light up and then you can play tape source on the TAPE terminal. Press again the button currently accessed, to play sources selected by input selector ⑪, indicator goes out.

⑭ RDS button

This button is used for the RDS search (refer to page 12) and PTY search (refer to page 12), and TIP search (refer to page 12) operations, and to input the station name (refer to page 12, 13).

⑮ BAND (Band selector switch)

Press this switch to select the FM or AM (MW) band.

⑯ AUTO (Tuning mode button)

This switches between auto and manual tuning.

Auto tuning: When the UP button is pressed, the radio is tuned automatically to a higher frequency. Press the DOWN button to tune to a lower frequency. Use this position to eliminate noise when no signals or weak signals are being received.

Manual tuning: In this position, the radio can be tuned manually. Reception is automatically monaural when in the manual mode.

⑰ TUNING (Tuning buttons)

Use these to change the received frequency to a higher frequency (UP) or a lower frequency (DOWN).

When writing station names, use these buttons to select the letters. (Refer to Page 13.)

⑱ MEMORY (Memory button)

This switch is used to store the desired radio station to a memory.

⑲ Presetting stations

After pressing the MEMORY button, press the SHIFT/PTY button to select the memory block, A to E. Now use the PRESET UP and DOWN buttons to specify the preset channel number. Press the MEMORY button again to store the station at the specified preset channel.

⑳ Preset (Preset station buttons)

These buttons are used for storing stations or recalling stations which have been preset. Using the SHIFT button you can preset a total of 40 FM or AM stations into preset channels.

Once a radio has been memorized, the same station can later be tuned in instantly simply by recalling the corresponding preset channel with PRESET UP or DOWN button.

DISPLAY

㉑ RDS Indicator

This lights when receiving RDS broadcasts, and flashes during the RDS search operations.

㉒ TA Indicator

This lights when receiving traffic announcements.

㉓ TP Indicator

This flashes during the TP search operation and lights when TP stations are tuned in.

㉔ PTY Indicator

This flashes during the PTY (Programme type) search operation.

㉕ TUNED Indicator

This lights when a station is properly tuned in.

㉖ STEREO Indicator

This lights when receiving stereo broadcasts. It remains off when receiving AM broadcasts.

㉗ AUTO Indicator

This indicates the tuning mode. It lights in the auto mode, and remains off in the manual mode.

NOTE:

- TA (Traffic Programme)
Stations scheduled to broadcast traffic programmes
- TA (Traffic Announcement)
Traffic information broadcasts

REAR PANEL

㉘ FM ANT (FM antenna terminals)

75-ohm coaxial cable can be connected to this terminal. For antenna connecting procedure, see the ANTENNA INSTALLATION.

㉙ GND (Grounding terminal)

The grounding wire of the turntable is connected here. • Hum or noise may be generated if the grounding wire is not connected.

㉚ AM ANT (AM antenna terminals)

Connect the attached AM loop antenna. (Refer to page 10 for connections.)

Connect to this terminal when a medium wave outdoor antenna is used.

㉛ PHONO (Phono input terminals)

The output cord of the turntable is connected here. Since the input sensitivity of "PHONO" is extremely high, do not use the unit without the input pin cord. If used without this cord, the speakers may generate hum.

㉜ CD

The output cord of the CD player is connected here.

㉝ VIDEO

A VIDEO, such as a VCR or Video Disc may be connected here.

㉞ TAPE-1, TAPE-2 (Tape deck playback/recording terminal) (DRA-565RD)

Two tape decks or tape deck can be connected to these jacks for full-fledged playback, recording and tape dubbing operation.

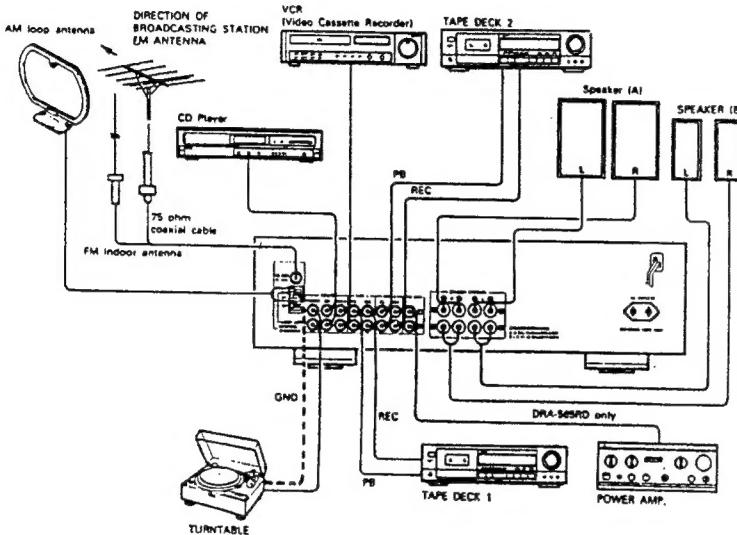
㉟ TAPE (DRA-365RD)

Tape decks can be connected for full use including playing or copying.

NOTES

- This receiver has a full back-up system. When the power is turned on, the INPUT SELECTOR buttons are set to the last mode set before the power was turned off.
- When using this receiver in close proximity to video equipment (TV, VCR, VDP, etc.), noise may be generated in AM broadcasts. To

avoid this, keep the receiver as far away from other video components as possible, or place the AM loop antenna where noise is reduced. If the noise is not reduced, turn off the power of the video components when listening to AM broadcasts.

CONNECTIONS**ANTENNA INSTALLATION****FM ANTENNA**

The supplied indoor FM antenna can be used inside wooden houses for receiving local FM stations and other strong FM signals. Stretch out the ends of the antenna and mount the antenna on the wall or ceiling where optimum reception is achieved. A indoor FM antenna may not consistently ensure stable reception, due to environment changes. In such cases, the indoor FM antenna should only be used temporarily until an outdoor FM antenna has been installed.

When connecting an outdoor FM antenna, the use of 75 ohm coaxial cable (SC-2V, SC-2V) is strongly recommended.

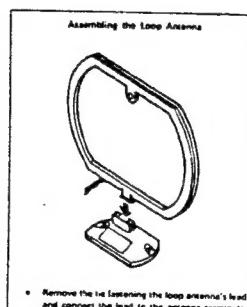
AM ANTENNA

Attach the supplied AM loop antenna even when using an outdoor antenna.

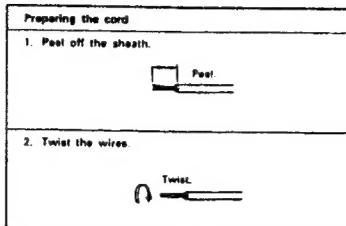
Connect the leads to the AM and GND terminals.

Also use the AM terminals for connecting an outdoor AM antenna (when making such a connection do not disconnect the AM loop antenna.)

Adjust the loop antenna to obtain optimum reception. Where broadcast stations are distant and only weak signals are received, or where signals are blocked, it is best to install an outdoor AM antenna.

**SPEAKER CONNECTION**

Confirm polarity (+, -) and left and right channels (L, R). Connect the speaker pairs to the SPEAKER terminals A or B on the back panel. Connections must be made with power cord disconnected.

**Connecting the front speaker terminals**

- Loosen by turning counterclockwise.
- Insert the cord and tighten by turning clockwise.

CAUTION**Protective Circuit**

This set is equipped with a high speed protective circuit. This circuit protects the internal circuitry from damage due to large currents flowing when the speaker jacks are not completely connected or when an output is generated by a short circuit.

This protective circuit's operation cuts off the output to the speakers. In such a case, be sure to turn the power to the set off and check the connections to the speakers. Then turn the power on again. After muting for several seconds, the set will operate normally.

Notes:

- Do not plug the power cord into the AC wall outlet until all connections have been completed.
- Make sure channels are correctly connected. Connect Left channels to Left channels and Right channels to Right channels. Follow the color markings of plugs and terminals to make sure mistakes are not made.
- Connect all pin-plugs securely, pushing them completely into the jacks. Incomplete connections will cause noise generation.
- Binding the connection cables to power cords, or running such cables close to power supply transformers will cause humming or noise, and should thus be avoided.

Using the Various Functions

1. Presetting stations in the memory

The frequency and the name of the radio station (including names which you have input yourself), are also stored in the memory. In particular, the various RDS functions can be used effectively when RDS stations are stored in the memory.

How to preset the memory:

Press the MEMORY button $\textcircled{1}$. The "MEMO" indicator on the display $\textcircled{1}$ lights. Next, use SHIFT/PTY button $\textcircled{2}$ to select the memory block A, B, C, D or E. Now press the PRESET UP or DOWN button $\textcircled{3}$ to specify the preset channel number, and then press the MEMORY button $\textcircled{4}$ to store the station in the memory.

The preset channel numbers for the different memory blocks are as follows.

Memory block A	: 1 to 8
Memory block B	: 1 to 8
Memory block C	: 1 to 8
Memory block D	: 1 to 8
Memory block E	: 1 to 8

2. Auto Memory (FM only)

The DRA-565RD/DRA-365RD is equipped with an auto memory function.

Connect the antenna, set it so that stations can be received, then hold in the MEMORY button and press the POWER button to turn the power on. Stations for which the auto stop function operates are stored in the preset memory in the order A1 to A8, B1 to B8, and so on, through E8.

Channel A1 is tuned in after the auto memory operation is completed.

Using this function makes it possible to find out the overall reception conditions of the receivable stations. The memory can be used effectively by recalling the channels in the preset memory and replacing stations whose reception is poor with stations whose reception is good, using the procedure described in 1 above.

3. Recalling preset stations

Use the SHIFT/PTY button $\textcircled{2}$ to select memory block A, B, C, D or E, then press the PRESET UP or DOWN button $\textcircled{3}$ to recall the station stored in the memory.

If the PRESET UP or DOWN buttons are pressed without pressing the SHIFT/PTY button $\textcircled{2}$, the stations are recalled in the order A1 to A8, B1 to B8, and so on, through E8.

4. RDS search (for FM only)

Use this function to automatically tune to stations offering Radio Data Service.

This operation is also possible by pressing the TUNER button on the remote control unit once when the function is set to the TUNER mode.

5. PTY search (for FM only)

Use this function to find stations broadcasting a designated type of programme type (PTY).

This operation is also possible by pressing the TUNER button on the remote control unit twice when the function is set to the TUNER mode. Next, press the PANEL button on the remote control unit, select the PTY, then press the PRESET UP or DOWN buttons to start the PTY search function in the specified direction.

Operation Display

1. Press the RDS button twice. PTY SEARCH
2. Press the SHIFT/PTY button. Designated programme type [Always do this to designate the programme type if "PTY" is displayed in step 1.]
3. Press the PRESET UP or DOWN button $\textcircled{1}$.

"PTY SEARCH" flashes on the display.
(Preset memory channels A1 to E8 are being searched.)
If there is no station broadcasting the designated programme type with the above operation, all the reception bands are searched.
The station name is displayed after searching stops.

4. Press the PRESET UP or DOWN button again while the PTY mark is flashing.
(If no other station broadcasting the designated programme type is found when all the frequencies are searched, "NO PROGRAMME" is displayed.)

* The programme types which can be displayed are listed on Page 13.

6. TP Search (for FM only)

This function is used to find stations scheduled to broadcast traffic programmes (TP stations). This operation is also possible by pressing the TUNER button on the remote control unit three times when the function is set to the TUNER mode.

Operation Display

1. Press the RDS button $\textcircled{1}$ 3 times. TP SEARCH
2. Press the PRESET UP or DOWN button $\textcircled{1}$.

"TP SEARCH" flashes on the display.
(Preset memory channels A1 to E8 are being searched.)
If no TP station is found with the above operation, all the reception bands are searched.
The station name is displayed after searching stops.

3. Press the PRESET UP or DOWN button again while the TP mark is flashing.
(If no other TP station is found when all the frequencies are searched, "NO PROGRAMME" is displayed.)

7. Writing station names
You can write in station names yourself.
(Up to 8 characters)
(Refer to the table of characters on page 13.)

Operation Display

1. Press the RDS button 4 times. First character flashes.
2. Use the TUNING and DOWN buttons $\textcircled{1}$ to select the desired character.
3. Use the SHIFT/PTY button $\textcircled{2}$ to move to the next place.
4. After writing the entire station name, store it in the memory.
(Refer to page 8.)

RDS Emergency Alert:
"ALARM" will flash on the display when the unit receives the Emergency Programme Type Code (PTY31) from an RDS station. This feature may not operate properly if the signal from the RDS station is too weak or is subjected to interference.

8. Clearing station names
1. Recall the station name you want to clear.
2. Press the RDS button 4 times until the character at the first place flashes.
3. Then press the SHIFT/PTY button for at least 2 seconds. The current station name will then be cleared.

Note: Station names must be stored in a preset memory to be retained. If the power is turned off, or if the band (AM/FM) is changed, the station name will be lost. Be sure to store the entered station name in a Preset Memory before changing the band or turning the power switch OFF.

* The following programme types can be designated:

NEWS	NEWS	M.O.R. MUSIC
AFFAIRS	AFFAIRS	L-CLASSICS
INFORMATION	INFORMATION	LIGHT CLASSICS
SPORT	SPORT	SERIOUS CLASSICS
EDUCATION	EDUCATION	OTHER MUSIC
DRAMA	DRAMA	EDUCATION
CULTURE	CULTURE	CULTURE
SCIENCE	SCIENCE	SCIENCE
VARIETY	VARIETY	VARIETY
POP MUSIC	POP MUSIC	POP MUSIC
ROCK MUSIC	ROCK MUSIC	ROCK MUSIC

Table of characters

The characters are input in the order shown to the right. Use the TUNING buttons $\textcircled{1}$ to select the desired characters.

→A B C D E F G H I J K L M N O P Q R S T U V W Y Z
→0 1 2 3 4 5 6 7 8 9 C \ J - & ' () # , . / = SPACE

PLAYBACK USING THE REMOTE CONTROL

The accessory RC-174 remote control unit is used to control the RECEIVER from a distance.

(1) Inserting the dry cell batteries

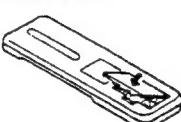
- 1 Remove the rear cover on the remote control unit.



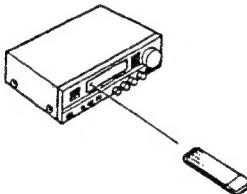
- 2 Insert two size "AA" (R6) dry cell batteries as shown in the diagram on the battery supply unit.



- 3 Replace the rear cover.



(2) Directions for use



Note on Operation

- Do not press the operating buttons on the receiver and the remote control unit at the same time. This will cause misoperation.
- Operation of the remote control unit will become less effective or erratic if the infrared remote control sensor on the receiver is exposed to strong light or if there are obstructions between the remote control unit and the sensor.
- In case you operate your VCR, TV or other components by remote control, do not operate buttons on two different remote control units at the same time. This will cause mis-operation.

Notes on Use of the Batteries

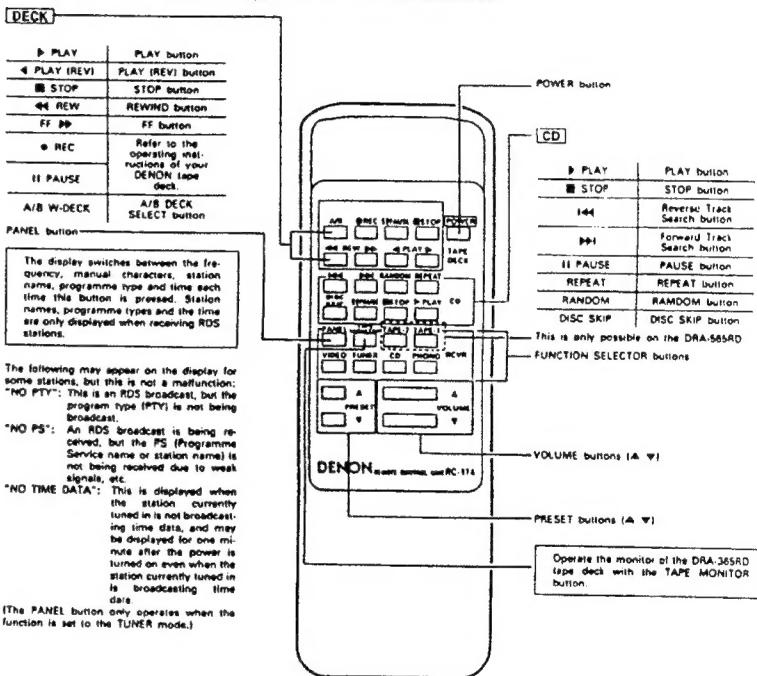
- The remote control unit uses size "AA" (R6) dry cell batteries.
- The batteries will need to be replaced approximately once a year. This will depend upon how often the remote control is used.
- If, in less than a year from the time new batteries were inserted, the remote control fails to operate the receiver from a near-by position, it is time to replace the batteries.
- Insert the batteries properly, following the diagram on the remote control battery supply unit, and making sure to align the plus and minus sides of each battery.
- Batteries are prone to damage and leakage. Therefore:
 - Do not combine new batteries with used ones.
 - Do not combine different types of batteries.
 - Do not jumper the opposite poles of the batteries, expose them, heat or break them open, or pull them into open fire.
- When the remote control is not to be used for a long period of time, remove the batteries from the unit.
- If the batteries have leaked, remove any battery fluid from the inside of the battery supply unit by wiping it out thoroughly, and insert new batteries.

Besides being able to operate the DRA-565RD/365RD receiver with this remote control unit, you can also operate a DENON cassette deck and CD player from this handy full-system remote control unit.

Remote Control Section Full-system Remote Control Unit

The full-system remote control unit operates all major functions of the receiver such as function switching, volume control, and preset station selection. But that's not all! The same control pad can also control the major functions of a DENON CD player and cassette deck to create a remarkably ergonomic and versatile DENON system with all the quality sound reproduction that the devoted audiophile expects.

Remote Control Unit RC-174 supplied with DRA-565RD/365RD



- The RC-174 Remote Control Unit can control CD players and cassette decks made by DENON.
- Note that operation may not be possible for some models.
- Buttons are conveniently separated into groups, each group controlling one specific component. The groups are RECEIVER, CD and DECK.

For details on operating other components, refer to the instruction manuals for the CD player and/or cassette deck.

CAUTION:

- If the power is turned off with the remote control unit, the receiver is switched to the power stand-by state. If you are to be absent for a long period of time, be sure to turn the power off using the POWER switch on the receiver.
- A pair of fat digit of fluorescent display light while the receiver is in the power stand-by state.
- You may experience erratic operation of the remote control unit if it is operated in fluorescent light and direct sunlight; in particular if this light strikes the remote control sensor on the receiver. However, this is not a malfunction, and if this should happen, protect the sensor against such light.

TROUBLESHOOTING

1. Have all connections been made PROPERLY?
 2. Have you followed all operational instructions correctly?
 3. Check speaker and the turntable systems for proper operation.
- When your unit does not seem to be operating correctly, first check the items in the following table. If the symptom does not correspond to any of the problems as shown below, turn off the power sources immediately and contact your DENON dealer.

Problem	Cause	Remedy
FM AND AM RECEPTION		
Radio program can not be received.	<ul style="list-style-type: none"> • Antenna connection is wrong. • A signal strength is weak. 	<ul style="list-style-type: none"> • Check the connection. • Check the antenna installation.
Noise is reproduced.	<ul style="list-style-type: none"> • A signal strength is weak. • Automobile ignition noise interferes with reception. • Other electrical equipment interferes with reception. 	<ul style="list-style-type: none"> • Install an outdoor antenna. • Keep the antenna away from the street. • Keep the equipment away from this set, or turn off the power of the other equipment.
The preset frequencies are erased.	<ul style="list-style-type: none"> • The memory back-up term (about 1 month) passed. 	<ul style="list-style-type: none"> • Preset again.
In automatic tuning, the frequency doesn't stop at the radio station.	<ul style="list-style-type: none"> • A signal strength is weak. 	<ul style="list-style-type: none"> • Use manual tuning
In automatic tuning, it stops at the one step lower or higher frequency than the radio station.	<ul style="list-style-type: none"> • Noise or strong signal strength is received. 	<ul style="list-style-type: none"> • Use manual tuning for optimum reception.
PLAYBACK OF THE AUDIO EQUIPMENTS		
No sound is produced with power on.	<ul style="list-style-type: none"> • Input and speaker cords connection are wrong. • Speaker switch is off. • The INPUT SELECTOR buttons are in wrong position. • The protective circuit is operating. • The fuse has blown out. 	<ul style="list-style-type: none"> • Check the connection. • Turn on speaker switch. • Check these position. • Turn the power off once, check the connections to the speakers, then turn the power on again. • Ask your dealer, or the nearest DENON representative.
Audible hum when playing records.	<ul style="list-style-type: none"> • The input and grounding cords connection of the turntable are wrong. • The cords connection of the cartridge are wrong. • The interference from the nearby TV or radio transmission antenna. 	<ul style="list-style-type: none"> • Check the connection. • Check the connection. • Ask your dealer, or the nearest DENON representative.
Howling is produced when the volume control is turned up too high while playing records.	<ul style="list-style-type: none"> • The vibrations and sounds transmit from the speakers to the turntable. 	<ul style="list-style-type: none"> • Insulate the vibrations, or keep the speakers away from the turntable.
Cracking noise is produced when playing records.	<ul style="list-style-type: none"> • The record is stained with the dust. • The stylus tip of the cartridge is stained with the dust. • The cartridge is defective. 	<ul style="list-style-type: none"> • Clean the record. • Clean the stylus tip. • Try the other cartridge.

SPECIFICATIONS

AMPLIFIER SECTION		TUNER SECTION	
Continuous Power Output (DIN)	DRA-565RD: 80 W + 80 W (4 ohms, 1 kHz) DRA-365RD: 62 W + 62 W (4 ohms, 1 kHz)	[FM] (note: μ V at 75 ohms, 0 dBf = 1×10^{-10} W)	87.5 ~ 108 MHz
Power Bandwidth (MF):	10 Hz ~ 40 kHz (T.H.D. 0.1%, both channels driven into 8 ohms)	Usable Sensitivity:	0.5 μ V (10.3 dB)
Total Harmonic Distortion:	0.03% (-3 dB at rated output, 8 ohms)	Signal to Noise Ratio (MF-A):	MONO 82 dB STEREO 78 dB
Frequency Response:	PHONO RIAA Standard Curve (Recording Output) MM 20 Hz ~ 20 kHz ± 0.5 dB CD, VIDEO, 20 Hz ~ 50 kHz ± 1.5 dB (at 1W) TAPE-1, TAPE-2 (DRA-565RD) TAPE (DRA-365RD)	Image Rejection: Selectivity (2.300 kHz): Frequency Response: Stereo Separation (at 1 kHz): [AM]	85 dB 55 dB 30 Hz ~ 15 kHz ± 0.2 dB 40 dB Receiving Range: 522 ~ 1611 kHz
Input Sensitivity and Impedance:	PHONO MM 2.5 mV 47 kohms CD, VIDEO, 150 mV 29 kohms TAPE-1, TAPE-2 (DRA-565RD) TAPE (DRA-365RD)	Usable Sensitivity: Signal to Noise Ratio:	18 μ V 55 dB
Minimum Input Level (at 1 kHz):	PHONO MM 120 mV	General Power Supply:	AC 230V 50 Hz
Signal to Noise Ratio (MF-A):	PHONO MM 76 dB (at 5.0 mV input) CD, VIDEO, 96 dB TAPE-1, TAPE-2 (DRA-565RD) TAPE (DRA-365RD)	Power Consumption:	145 W (DRA-565RD) 129 W (DRA-365RD)
Tone Controls:	BASS ± 10 dB at 100 Hz TREBLE ± 10 dB at 10 kHz	Power Outlets:	SWITCHED 100 W
Loudness, Control Effect:	VARIABLE LOUDNESS at maximum position 50 Hz/10 kHz, ± 10 dB/ ± 8 dB	Dimensions:	434 mm (W) x 130 mm (H) x 312 mm (D) (DRA-565RD) 434 mm (W) x 120 mm (H) x 312 mm (D) (DRA-365RD)
PRE-OUT terminals Rated output: (DRA-565RD only)	2 V (at 100 kohm load)	Weight:	7.2 kg (DRA-565RD) 6.0 kg (DRA-365RD)
REMOTE CONTROL UNIT		External dimensions:	RC-174 Infrared pulse system 3V DC Two size "AA" (R6) dry cell batteries 60 mm W x 175 mm H x 18 mm D
		Weight:	120 g (Includes batteries)

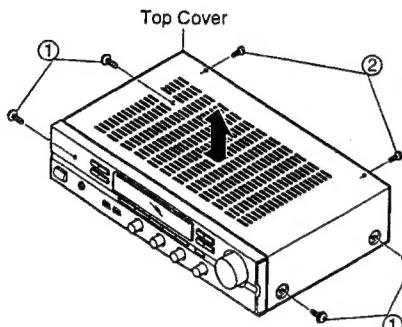
Design and specifications are subject to change without prior notice.

DISASSEMBLY

(To reassemble reverse disassembly)

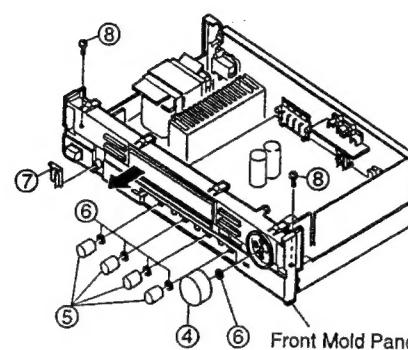
● Top Cover

Remove 4 screws ① and 2 screws ②.



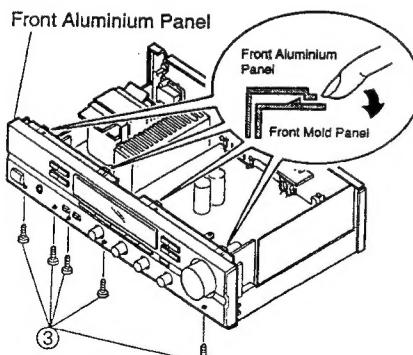
● Front Mold Panel

- (1) Pull out Volume knob ④ and 4 round knobs ⑤.
- (2) Remove 5 nuts ⑥ and Speed Nut ⑦.
- (3) Remove 2 screws ⑧.



● Front Aluminium Panel

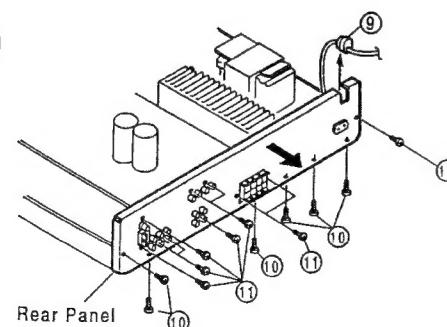
Remove 4 screws (365RD) 5 screws (565RD) ③ and undo hooks at 4 places.



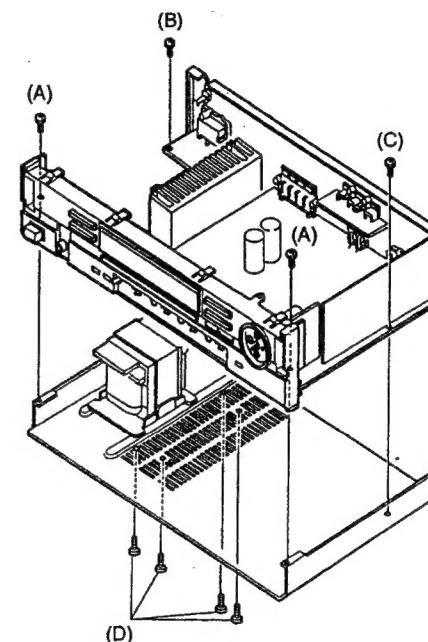
● Rear Panel

- (1) Disconnect cord bush ⑨.
- (2) Remove 7 screws ⑩, and 8 screws (365RD) 9 screws (565RD) ⑪.

*Screws 11 is tighten.

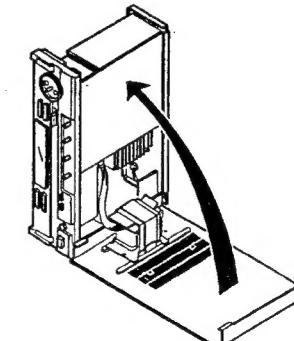


● Despite the transformer and PWB are connected with the wire, an arrangement clamer is relatively easy to remove at a time of servise.

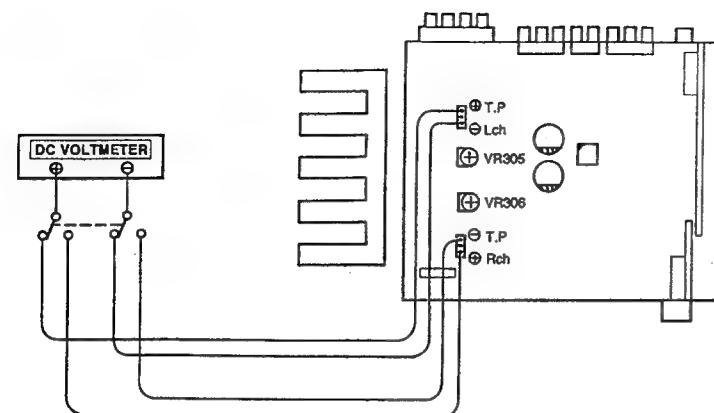


- (1) Disassemble Front Aluminum Panel (refer to previous item 2).
- (2) Remove 4 screws (D) securing the Radiator to the Bottom Cover.
- (3) Unfasten 2 screws on the surface and 5 screws on the bottom of Rear Panel (refer to previous item 4).
- (4) Remove 2 screws (A) securing the Inner Panel.
- (5) Untighten a screw (C) and detach Main PWB, remove a screw (B) and detach Power Supply PWB.
- (6) Remove arrangement clamer for the wire of Transformer.
- (7) Hold and lift the Back Panel and Inner Panel.

Checking is feasible by positioning the PWB upright.

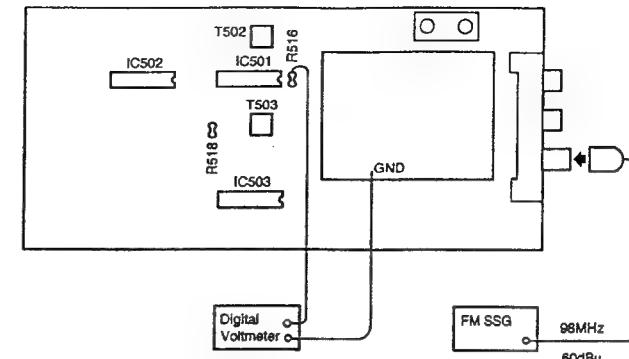


METHOD OF ADJUSTMENTS



CONNECTION DIAGRAM OF MEASURING INSTRUMENTS

● FM SECTION



Adjust T502, Potential difference across R516 should be within 50mV.

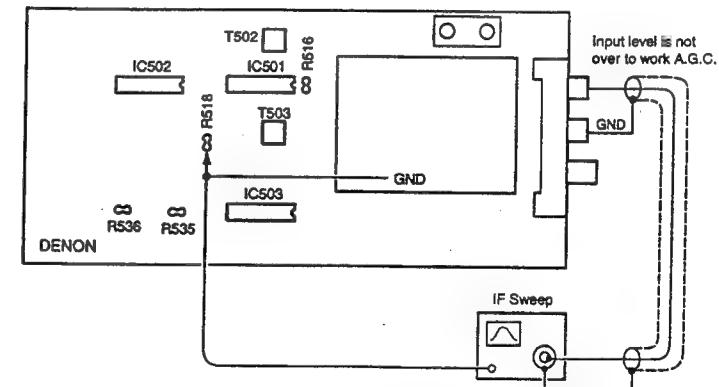
● AM SECTION

IDLING CURRENT

- (1) Set controls as follows.

POWER Switch	→ off (■)
VOLUME Control	→ 0 (min.)
SPEAKERS	→ off (■)
Temperature	→ 15°C - 30°C (59°F - 86°F)
VR305 and VR306 of the IU-2718-1 (Main Unit)	→ MIN (○)

- (2) Connect DC Voltmeter to the T.P Lch and T.P Rch of the 1U-2718.
 - (3) Turn the Power Switch on and rotate VR305 clockwise so that the DC Voltmeter reads $2.5\text{ mV} \pm 0.2\text{ mV}$ DC at the T.P Lch. Follow the same procedure to VR306 for T.P Rch.
 - (4) Warm up for three minutes, then readjust VR305 and VR306 so that the DC Voltmeter reads $2.5\text{ mV} \pm 0.5\text{ mV}$ DC.
 - (5) Warm up for 10 minutes, then readjust VR 305 and VR306 so that the DC Voltmeter reads $2.5\text{ mV} \pm 0.5\text{ mV}$ DC.

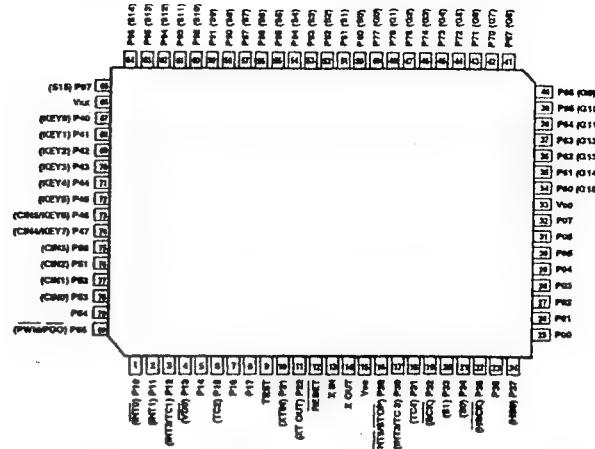
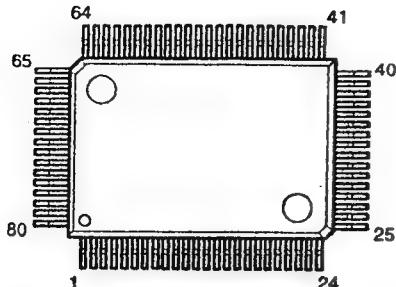


Adjust T503 for maximum height and best symmetry curve.

SEMICONDUCTORS

● IC's

TMP87CM71F (IC601)

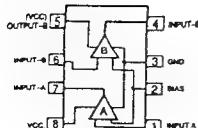
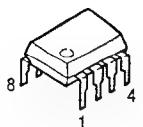
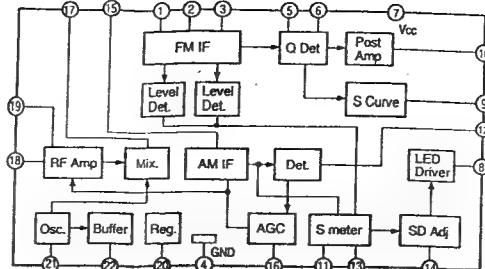
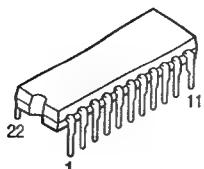


TMP87CM71F Port Allocation Table

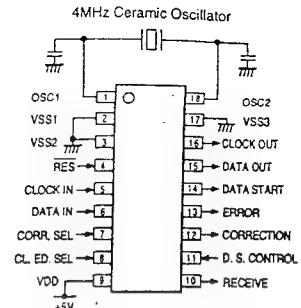
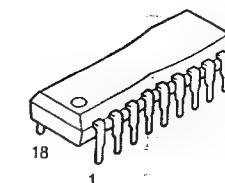
Pin No.	Symbol	VO	Logic	Initial Setting	Function
1	STOP	I	L	—	Power down detection ("L" = at power down).
2	MUTE (A)	I	—	—	MUTE (A) output ("H" = MUTE)
3	RDS	I	Serial	—	RDS data (start) input.
4	RES	O	L	H	LC7074 reset output.
5	GND	I	Serial	—	Not used.
6	FCK	O	Serial	L	Function control output (LC7821) for F-CK.
7	FDA	O	Serial	L	Function control output (LC7821) for F-DATA.
8	F-STB	O	H	L	Function control output (LC7821) for F-STB.
9	GND	I	—	—	Connected to GND.
10	SD	I	L	—	Tuned signal input ("L" = at tuned in).
11	GND	I	—	—	Not used.
12	RESET	I	L	—	Reset input.
13	XIN	I	—	—	Oscillation circuit (4MHz).
14	XOUT	I	—	—	Oscillation circuit (4MHz).
15	Vss	PW	—	—	GND
16	GND	I	—	—	GND
17	REM	I	L	—	Remote control signal input.
18	ST	I	L	—	Stereo signal input ("L" = at stereo).
19	RCK	I	Serial	—	RDS data (clock) input.
20	RDA	I	Serial	—	RDS data (data) input.
21	GND	I	—	—	Not used.
22	PCK	O	Serial	L	LM7001 control output for PLL-CK (CL).
23	PDA	O	Serial	L	LM7001 control output for PLL-DATA (DATA).
24	PSTB	O	H	L	LM7001 control output for PLL-STB (CE).
25	GND	O	—	L	GND
26	GND	O	—	L	GND
27	AM	O	L	L	AUTOMANUAL control.
28	GND	I	—	—	Not used.
29	P OF	O	H	L	Power control output ("H" = ON).
30	VR-UP	O	H	L	Power volume control output (LB1639 ON = at "H").
31	VR-D	O	H	L	Power volume control output (LB1639 ON = at "H").
32	SP-R	O	H	L	Speaker relay control output (ON = at "H").
33	Voo	PW	—	—	+5V
34	GND	I	—	—	GND
35	GND	I	—	—	GND
36	1G	O	—	—	FL tube control output for 1G.
37	2G	O	—	—	FL tube control output for 2G.
38	3G	O	—	—	FL tube control output for 3G.
39	4G	O	—	—	FL tube control output for 4G.

Pin No.	Symbol	VO	Logic	Initial Setting	Function
40	SG	O	—	—	FL tube control output for SG.
41	6G	O	—	—	FL tube control output for 6G.
42	7G	O	—	—	FL tube control output for 7G.
43	8G	O	—	—	FL tube control output for 8G.
44	9G	O	—	—	FL tube control output for 9G.
45	10G	O	—	—	FL tube control output for 10G.
46	11G	O	—	—	FL tube control output for 11G.
47	12G	O	—	—	FL tube control output for 12G.
48	13G	O	—	—	FL tube control output for 13G.
49	14G	O	—	—	FL tube control output for 14G.
50	S0 (a)	O	—	—	FL tube control output for P(a).
51	S1 (b)	O	—	—	FL tube control output for P(b).
52	S2 (c)	O	—	—	FL tube control output for P(c).
53	S3 (d)	O	—	—	FL tube control output for P(d).
54	S4 (e)	O	—	—	FL tube control output for P(e).
55	S5 (f)	O	—	—	FL tube control output for P(f).
56	S6 (g)	O	—	—	FL tube control output for P(g).
57	S7 (h)	O	—	—	FL tube control output for P(h).
58	S8 (i)	O	—	—	FL tube control output for P(i).
59	S9 (k)	O	—	—	FL tube control output for P(k).
60	S10 (m)	O	—	—	FL tube control output for P(m).
61	S11 (n)	O	—	—	FL tube control output for P(n).
62	S12 (p)	O	—	—	FL tube control output for P(p).
63	S13 (q)	O	—	—	FL tube control output for P(q).
64	S14 (r)	O	—	—	FL tube control output for P(r).
65	S15 (s)	O	—	—	FL tube control output for P(s).
66	Vlk	PW	—	—	-15V
67	I	GND	I	—	GND
70					
71	VA	O	L	H	Video In/Out control ("L" = at selection) BV406G.
72	VB	O	L	H	Video In/Out control ("L" = at selection) BV406G.
73	K1	I	—	—	Key input (A/D conversion input).
74	K2	I	—	—	Key input (A/D conversion input).
75	K3	I	—	—	Key input (A/D conversion input).
76	K4	I	—	—	Key input (A/D conversion input).
77	VER	I	—	—	Forwarding country setting.
78	VER	I	—	—	Specification setting.
79	MUTE (T)	O	H	H	MUTE output ("H" = MUTE).
80	GND	I	—	—	GND

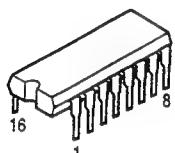
BA4558 (IC101)

LA1265 (S)
(IC501)

LC7074 (IC602)

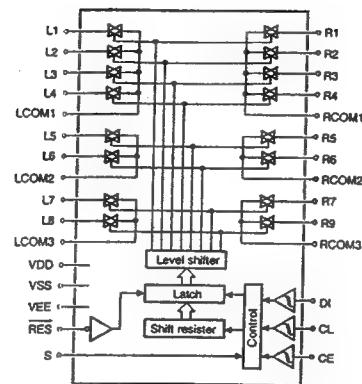
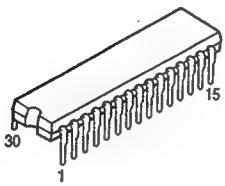


LM7001 (IC503)

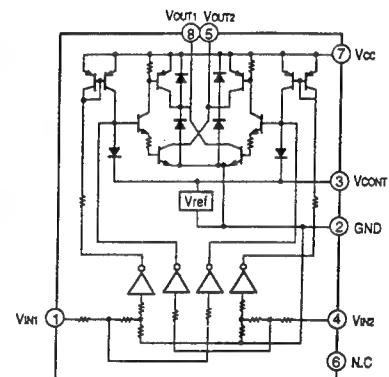


XOUT	1	VSS	16
XIN	2	PD2	15
CE	3	PD1	14
CL	4	VDD2	13
DATA	5	VDD1	12
SYC	6	FM IN	11
BO1	7	AM IN	10
BO2	8	BO3	9

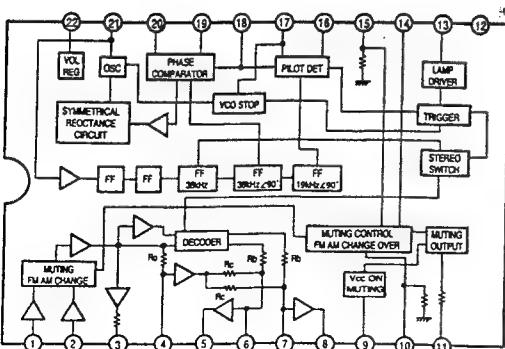
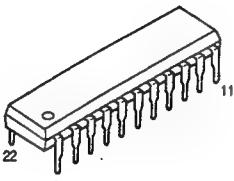
LC7821 (IC102)



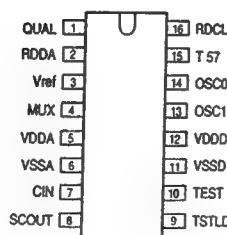
LB1639 (IC201)



LA3401 (IC502)

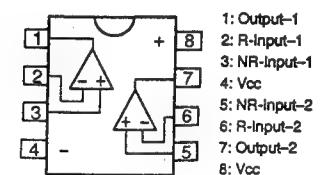
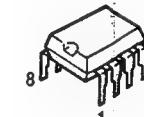


SAA6579T (IC601)



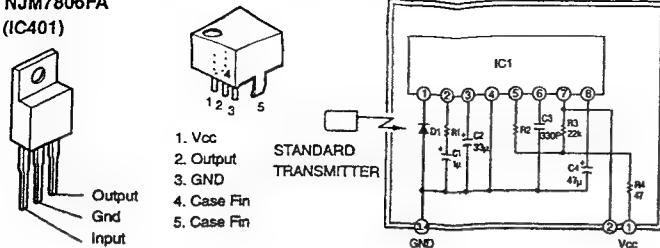
Pin No.	Symbol	Description
1	QUAL	Quality indication output.
2	RDOA	RDS data output.
3	T 57	
4	Vref	Reference voltage output (0.5 V _{DDA}).
5	MUX	Multiplex signal input.
6	OSC1	
7	VDDA	+5 V supply voltage for analog part.
8	VSSA	Ground for analog part (0 V).
9	VSSD	
10	CIN	Subcarrier input to comparator.
11	TEST	Test control.
12	TSTLD	Test control.
13	OSC1	
14	VDDA	+5 V supply voltage for digital part.
15	OSC2	Oscillator input.
16	RDCL	Oscillator output.

BA15218 (IC301)

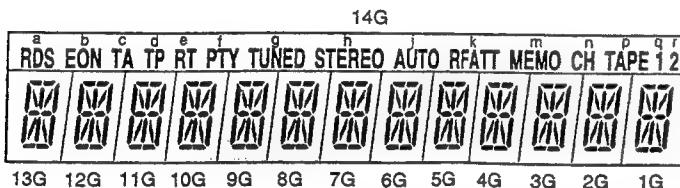
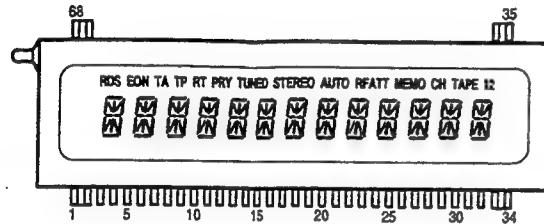


NJM78M12FA
(IC504)
NJM7806FA
(IC401)

SBX1610-52 (REMOTE SENSOR)



FLD (FIP14AM7R)



TERMINAL CONNECTION
(UPPER)

TERMINAL NO.	68	67	66	65	64	63	62	61	60	59	58	57	56	55	54	53	52
ELECTRODE	F1	F1	NP														
TERMINAL NO.			51	50	49	48	47	46	45	44	43	42	41	40	39	38	37
ELECTRODE			NP	F2	F2												

(LOWER)

TERMINAL NO.	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32	33	34
ELECTRODE	P	14G	13G	12G	11G	10G	9G	8G	7G	6G	5G	4G	3G	2G	1G	F2	F2
TERMINAL NO.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17
ELECTRODE	F1	F1	P	P	P	P	P	P	P	P	P	P	P	P	P	P	P

Notes : F : Filament
G : Grid
P : Anode
NP : No. Pin

● TRANSISTORS

2SA988(E/F)
2SA1515(R)
2SC1815(Y)
2SC1841(E/F)

2SB647A(C)
2SB1041(R)
2SD667A(C)

2SA933S(S)
2SA1038S(S/E)
2SC1740S(E)
2SC1740SLN(E)
2SC2058(Q)
2SC2389S(S/E)

2SB1328(P)
2SD2004(P)

2SK161(GR)

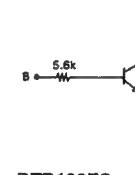
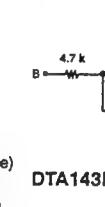
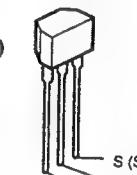
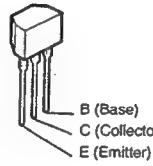
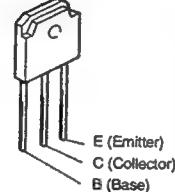
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2SA1491(O/P/Y)(Z)
2SC3853(O/P/M)(Z)
2SC3855(O/P/Y)(Z)

DTA143ES(4.7K-4.7K)
DTA114ES(10K-10K)
DTB123ES
DTC143ES(4.7K-4.7K)
RN-1241(A/B)
DTC144ES(47K-47K)

2SK365 (BL/GR)

DTC143ES

RN1241

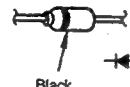


● DIODES & LED

1SS252

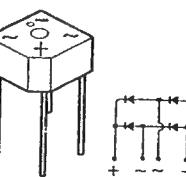
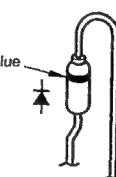
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MTZJ6.2A MTZJ8.2B
MTZJ6.8C MTZJ27D

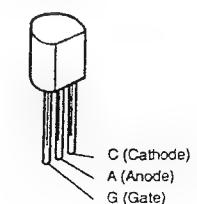


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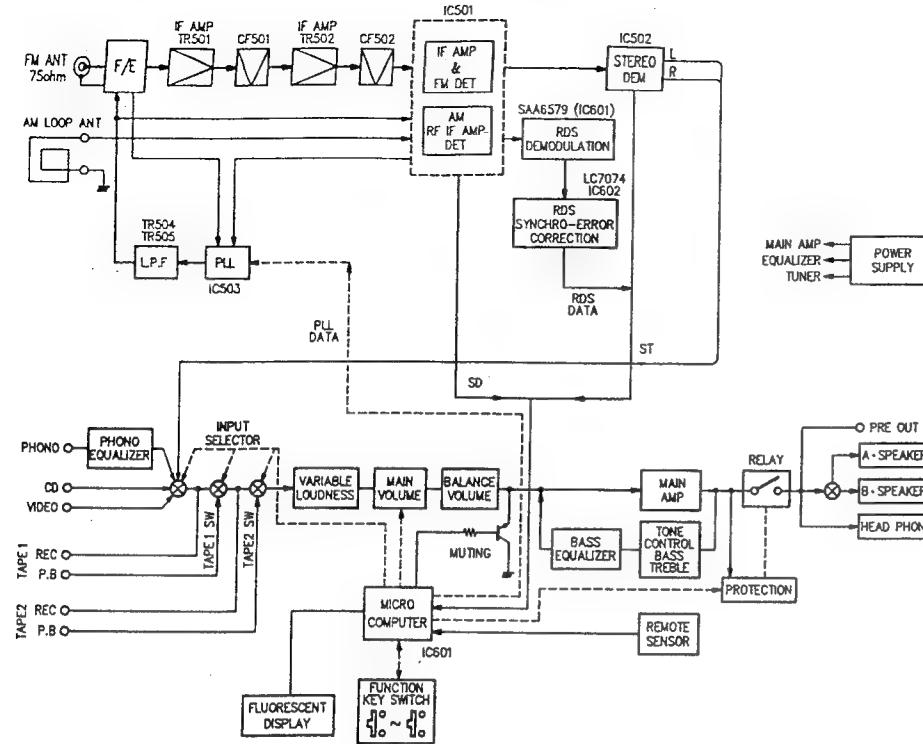
S4VB20



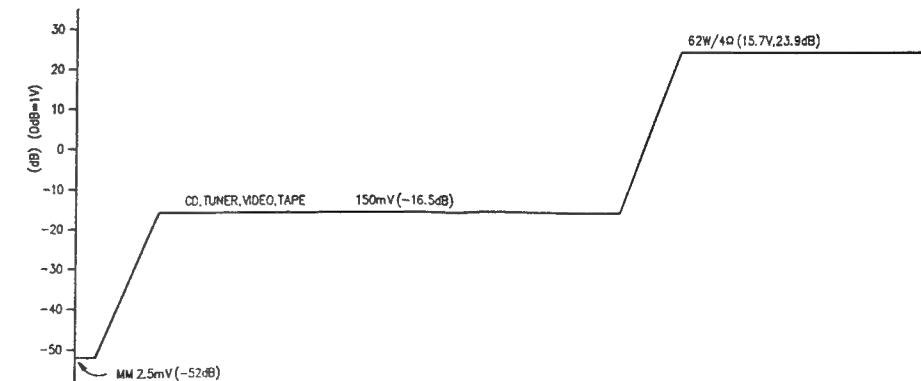
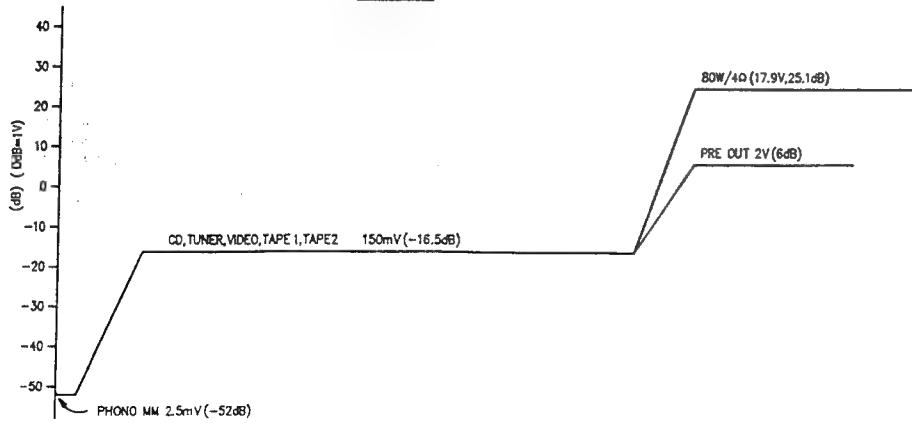
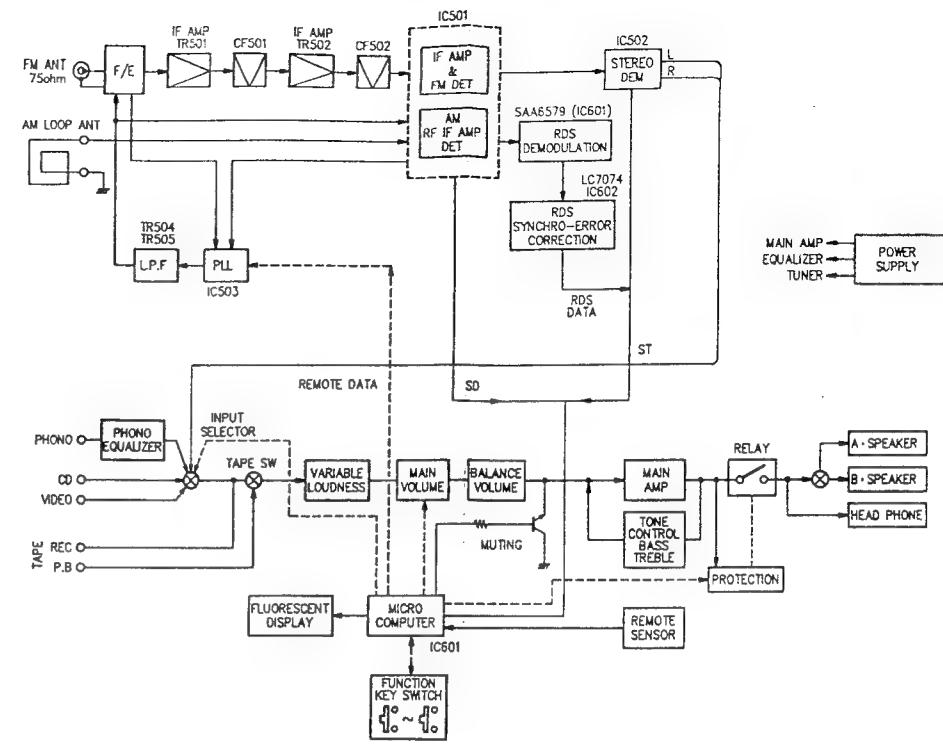
SFOR1A42



BLOCK/LEVEL DIAGRAM (DRA-565RD)



BLOCK/LEVEL DIAGRAM (DRA-365RD)



NOTE FOR PARTS LIST

- Part indicated with the mark "◎" are not always in stock and possibly to take a long period of time for supplying, or in some case supplying of part may be refused.
- When ordering of part, clearly indicate "1" and "1" (i) to avoid mis-supplying.
- Ordering part without stating its part number can not be supplied.
- Part indicated with the mark "*" is not illustrated in the exploded view.
- Not including Carbon Film ±5%, 1/4W Type in the P.W. Board parts list. (Refer to the Schematic Diagram for those parts.)

WARNING:

Parts marked with this symbol have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

• Resistors

Ex.: RN	14K	2E	182	G	FR
Type	Shape and performance	Power	Resistance	Allowable error	Others
RD : Carbon	2E : 18W	F : ±1%	P : Pulse-resistant type		
RC : Coaxial	2E : 14W	G : ±2%	N : Low noise type		
RS : Metal oxide film	2H : 1/2W	J : ±5%	NB : Non-burning type		
RW : Winding	3A : 1W	K : ±10%	PR : Fuse-resistor		
RW : Resistor	3A : 1W	M : ±20%	T : Lead wire forming		
RW : Metal mixture	3E : 3W				
	3H : 5W				

* Resistance
 1 8 2 = 1800 ohm = 1.8 kohm
 Indicates number of zeros after effective number.
 2-digit effective number.

* Units: ohm

1 R 2 = 1.2 ohm
 1-digit effective number.
 2-digit effective number, decimal point indicated by R.

* Units: ohm

• Capacitors

Ex.: CE	04W	1H	2R2	M	BP
Type	Shape and performance	Dielectric strength	Capacity	Allowable error	Others
CE : Aluminum foil electrolytic	0J : 6.3V	F : ±1%	NS : High stability type		
CA : Aluminum solid electrolytic	1A : 10V	G : ±2%	BP : Non-polar type		
CS : Ceramic electrolytic	1C : 18V	J : ±5%	NR : Pulse-resistant type		
CO : Film	1E : 25V	I : ±10%	OL : For change of discharge frequency		
CX : Ceramic	1V : 35V	M : ±20%	HF : For assuring high frequency		
CC : Ceramic	1H : 50V	Z : ±40%	U : UL part		
CP : Oil	2A : 100V	C : ±10%	C : CSA approved		
CM : Mica	2B : 125V	P : ±10%	W : UL-CSA type		
CF : Metallized	2C : 160V	-0%	F : Lead wire forming		
CH : Metallized	2D : 200V	C : ±0.25%F			
	2E : 250V	D : ±0.5%F			
	2F : 500V	E : ± Others			
	2G : 850V				

• Capacity (electrolyte only)

2 2 2 = 2200pF
 Indicates number of zeros after effective number.
 2-digit effective number.

* Units: pF.

2 R 2 = 2.2nF
 1-digit effective number.
 2-digit effective number, decimal point indicated by R.

* Units: pF.

• Capacity (except electrolyte)
 2 2 2 = 220pF = 0.022nF
 (More than 2) — Indicates number of zeros after effective number.
 2-digit effective number.

* Units: pF.

2 2 1 = 220pF
 (0 or 1) — Indicates number of zeros after effective number.
 2-digit effective number.

* Units: pF.

* When the dielectric strength is indicated in AC, "AC" is included after the dielectric strength value.

PRINTED WIRING BOARD PARTS LIST
1U-2731B MAIN UNIT (DRA-565RD)

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUTORS GROUP			
IC101	263 669 002	IC NM2068DDC	
IC102	262 1227 008	IC LC7821	
IC201	263 0476 002	IC LB1639	
IC301	263 0565 007	IC BA15218	
IC401	262 0793 002	IC NJM7806FA(S)	
IC601	262 1701 906	IC SA6579T	
IC602	262 1929 908	IC LC7074NM-TE-R	
TR201	269 0022 904	Transistor DTA143ES(4.7K-4.7K)	
TR251	274 0151 903	Transistor 2SD2004(P)	
TR252	272 0107 906	Transistor 2SB1328(P)	
TR253	273 0388 906	Transistor 2SC1740S(E)	
TR254	271 0192 905	Transistor 2SA0333(S)	
TR255	273 0432 904	Transistor 2SC2389S(S/E)	
TR256	271 0280 901	Transistor 2SA1038S(E)	
TR257	273 0388 906	Transistor 2SC1740S(E)	
TR301,302	269 0107 900	Transistor RN1241(A/B)	
TR303,304	273 0235 923	Transistor 2SC1841(EF)	
TR305,306	271 0131 924	Transistor 2SA888(EF)	
TR309,310	273 0235 923	Transistor 2SC1841(EF)	
TR315,316	273 0198 003	Transistor 2SC1815(Y)	
TR317,318	274 0151 903	Transistor 2SD2004(P)	
TR319,320	272 0107 906	Transistor 2SB1328(P)	
TR325,326	273 0235 923	Transistor 2SC1841(EF)	
TR327	271 0131 924	Transistor 2SA888(EF)	
TR401	272 0131 901	Transistor 2SB1041(R)	
TR402,403	273 0388 906	Transistor 2SC1740S(E)	Europe Model Only (Except for U.K.)
TR451	273 0388 906	Transistor 2SC1740S(E)	
TR452	269 0108 905	Transistor DTC143ES(4.7K-4.7K)	
TR453	273 0388 906	Transistor 2SC1740S(E)	
TR472,473	273 0388 906	Transistor 2SC1740S(E)	
TR474	271 0192 905	Transistor 2SA0333(S)	
TR475	273 0388 906	Transistor 2SC1740S(E)	
TR478,479	269 0040 902	Transistor DTC144ES(47K-47K)	
D202-204	276 0616 907	Diode 1SS252	
D303-306	276 0619 904	Diode 1S2471	
D307-312	276 0616 907	Diode 1SS252	
D401	276 0616 907	Diode 1SS252	
D402-404	276 0563 905	Diode 1SR35-200A	
D405	276 0388 007	Diode S4V20F	
D406	276 0616 907	Diode 1SS252	
D407-410	276 0563 905	Diode 1SR35-200A	
D451	276 0616 907	Diode 1SS252	
D452	276 0616 907	Diode 1SS252	
D471	276 0616 907	Diode 1SS252	
ZD251,252	276 0637 902	Zener Diode MTZ16.2A	
ZD401	276 0632 907	Zener Diode MTZ17D	
ZD451	276 0634 905	Zener Diode MTZ13.3A	
ZD452	276 0633 905	Zener Diode MTZ16.8C	
ZD471	276 0635 904	Zener Diode MTZ17.5C	
SC471	279 0016 904	Thyristor SF0R1A42	
RESISTORS GROUP			
△ R205-208	244 2050 933	Metallic 180ohm 1W	RS14B3A181JNBS(S)
△ R265,266	241 2387 940	Carbon 1Johm 1/4W	RD14B2E4R7JNBS
△ R311,312	241 2279 922	Carbon 620ohm 1/4W	RD14B2E621JNBS
△ R329,330	241 2378 920	Carbon 220ohm 1/4W	RD14B2E221JNBS
△ R331-338	244 2043 982	Metallic 122ohm 1W	RS14B3A122JNBS(S)
△ R43-346	241 2378 987	Carbon 1kohm 1/4W	RD14B2E102JNBS
△ R365,366	241 2379 932	Carbon 620ohm 1/4W	RD14B2E621JNBS
CAPACITORS GROUP			
VR102	211 0831 002	Variable 100kohm	V1620V2S=104R(MG)
VR201	211 0830 003	Variable 100kohm	V14V0PFB104
VR251	211 0827 003	Variable 250kohm	V11V0PFW254K
VR301	211 0828 002	Variable 250kohm	V14V0PFC254K
VR303	211 0829 001	Variable 50kohm	V14V0PFS03K
VR305,306	211 6093 912	Semi Fixed Resistor 4.7kohm	V06P3472

1U-2732B TUNER UNIT (DRA-565RD)

Ref. No.	Part No.	Part Name	Remarks
C353,354	256 1034 979	Film 0.01μF/50V	CF93A1H104J
C371-374	256 1034 979	Film 0.01μF/50V	CF93A1H104J
C377,378	254 4260 948	Electrolytic 1μF/50V	CE04W1H101M
C401	259 0007 702	Backup 220μF	SB CAP=822-C
C402	254 4254 903	Electrolytic 10μF/16V	CE04W1C100M
C403	254 4267 702	Electrolytic 330μF/25V	CE04W1E132M
C404	254 4260 948	Electrolytic 1μF/50V	CE04W1H101M
C405	254 4254 903	Electrolytic 10μF/16V	CE04W1C100M Europe Model Only (Except for U.K.)
C406,407	253 1181 904	Ceramic 0.01μF/50V	CK45FH1H03Z
C408,409	253 1181 905	Ceramic 0.0005μF/50V	CK45FH1H03Z
C415,416	254 4374 708	Electrolytic 220μF/50V	CE04W-822M(CDL)
C418	254 4260 948	Electrolytic 1μF/50V	CE04W1H101M
C419	256 1026 903	Film 0.1μF/25V	CB8042E104K
C451	254 4256 905	Electrolytic 4.7μF/35V	CE04W1H47M
C452	253 1181 904	Ceramic 0.01μF/50V	CK45FH1H03Z
C458	254 4260 948	Electrolytic 1μF/50V	CE04W1H101M
C471	254 4260 980	Electrolytic 10μF/50V	CE04W1H100M
C472	254 4260 993	Electrolytic 22μF/50V	CE04W1H22M
C473	254 4250 945	Electrolytic 330μF/6.3V	CE04W0J31M
C480	253 1146 907	Ceramic 0.01μF/50V	CK45FH1H03Z
C601,602	253 1181 904	Film 27μF/50V	CC45SH1H270J
C603-605	254 4250 916	Electrolytic 47μF/6.3V	CE04W0J47M
C607,608	253 4357 911	Ceramic 0.01μF/50V	CC45SL1H300J
C609	253 1181 904	Ceramic 0.01μF/50V	CK45FH1H03Z
C610	254 4250 916	Electrolytic 47μF/6.3V	CE04W0J47M
C611	253 1178 990	Ceramic 560μF/50V	CK45B1H561K
OTHERS PARTS GROUP			
L101,102	235 9003 002	FT2 Choke Coil	
L391,392	235 0068 004	Inductor	1μH
RL471	214 9003 005	Relay	
TP301,302	205 0190 036	3P NH Connector Base	TEST POINT
XL601	399 0178 007	Crystal	4.332MHz
XL602	399 0041 901	Ceramic Filter	CSA 4.00MHz
	204 8354 004	Head Phone Jack	
	204 8468 002	4P Pin Jack(S-GND)	
	204 8467 001	6P Pin Jack(S-GND)	
	212 4778 008	2P Push Switch	
	212 1074 007	1P Push Switch	
	205 0484 001	8P SP Terminal	
	205 0472 013	8P SP Terminal	
CN2A-2A	205 0185 025	2PWire Holder	
CN38,3F	205 0343 032	3P Connector Base (KR-PH)	CN3F Europe Model Only (Except for U.K.)
CN5A-5A	205 0185 054	5PWire Holder	
CN7A	205 0686 077	JL Connector(BT-E)	
CN8A	205 0535 002	8P Connector Base	
CN9B	205 0686 093	JL Connector(BT-E)	
CN9B	205 0748 093	9P JL Connector(R)	
CN27A	205 0880 016	27P FFC Connector Base	
	203 0539 060	1P SIN Cord Ass'y	
	203 0539 073	1P SIN Cord Ass'y	
	203 0539 086	1P SIN Cord Ass'y	
	203 0539 099	1P SIN Cord Ass'y	
	203 0475 043	1P Contact Ass'y	
	002 0012 081	2C Ribbon Cable	
	002 0041 010	5C Ribbon Cable	
	415 0309 013	P.V.C. Tube(L=10)	

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUTORS GROUP			
IC501	263 0891 001	IC LA126S(S)	
IC502	263 0439 007	IC LA3401	
IC503	262 0719 009	IC LM7001	
IC504	263 0801 004	IC LM70812FA(S)	
IC601	263 2039 017	IC TMP87CM71F-6192	
TR501	275 0051 909	Transistor 2SK161(GR)	
TR502	273 0434 902	Transistor 2SC205AS(Q)	
TR503	269 0150 902	Transistor DTB123ES	
TR504	273 0435 901	Transistor 2SC1740SLN(E)	
TR505	275 0053 907	Transistor 2SK365(BLGR)	
TR506	269 0046 906	Transistor DT114ES(10K-10K)	
TR507,508	269 0040 902	Transistor DTC144ES(47K-47K)	
TR509	271 0279 909	Transistor 2SA1515(P)	
D411	276 0616 907	Diode 1SS252	Europe Model Only (Except for U.K.)
ZD501	276 0636 903	Zener Diode MTZB.2B	
ZD651	276 0636 903	Zener Diode MTZB.2B	
RESISTORS GROUP (Not included Carbon Film ±5% 1/4W)			
CAPACITORS GROUP			
▲ C410	253 1014 702	Ceramic 0.01μF/400VAC	CK45P2GAC103MC Europe Model Only (Except for U.K.)
▲ C413	253 1014 702	Ceramic 0.01μF/200VAC	CK45P2GAC103MC
C501-505	253 1181 904	Ceramic 0.01μF/50V	CK45FH1H03Z
C506	253 1181 904	Ceramic 0.01μF/50V	CK45FH1H03Z
C507	253 4536 954	Ceramic 16μF/50V	CC45SL1H160J
C508	254 4254 909	Electrolytic 10μF/16V	CE04W1C100M
C509	253 1179 903	Ceramic 100μF/50V	CK45FH1H101K
C510-513	253 1181 904	Ceramic 0.01μF/50V	CK45FH1H03Z
C514	254 4256 936	Electrolytic 47μF/25V	CE04W1E47M
C515	254 4260 948	Electrolytic 1μF/50V	CE04W1H101M
C516	254 4260 964	Electrolytic 3.3μF/50V	CE04W1H3R3M
C517	253 1181 917	Ceramic 0.022μF/50V	CK45FH1H22Z
C518	254 4260 922	Electrolytic 0.33μF/50V	CE04W1HR33M
C519	253 1179 903	Ceramic 100μF/50V	CK45BH1H101K
C520	265 1034 937	Film 0.047μF/25V	CP93A1H473J(B)
C521	253 0031 904	Ceramic 0.047μF/25V	CK45E1473K
C522,C523	254 4254 912	Electrolytic 22μF/16V	CE04W1C22M
C525	254 4254 908	Electrolytic 10μF/16V	CE04W1C100M
C526,527	253 4448 903	Ceramic 330μF/50V	CC45SL1H331J
C529	254 4254 936	Electrolytic 47μF/16V	CE04W1C47M
C530	254 4260 948	Electrolytic 1μF/50V	CE04W1H101M
C531	254 4260 919	Electrolytic 0.22μF/50V	CE04W1HR22M
C532	254 4260 948	Electrolytic 0.1μF/50V	CE04W1H101M
C533	253 1181 904	Ceramic 0.01μF/50V	CK45FH1H03Z
C534,535	254 4260 951	Electrolytic 2.2μF/50V	CE04W1HR26M
C536	253 1146 907	Ceramic 0.01μF/50V	CK45FH1H103Z
C537	254 4260 906	Electrolytic 0.01μF/50V	CE04W1HR1M
C538	254 4254 938	Electrolytic 47μF/16V	CE04W1C47M
C539	254 3056 917	Electrolytic 1μF/50V	CE04D1H101MBP
C540	253 1181 917	Ceramic 0.022μF/50V	CK45FH22Z
C542,543	253 4536 954	Ceramic 16μF/50V	CC45SL1H160J
C544	253 1181 904	Ceramic 0.01μF/50V	CK45FH1H03Z
C545	254 4260 948	Electrolytic 1μF/50V	CE04W1H101M
C546	254 4254 938	Electrolytic 47μF/16V	CE04W1C47M
C547	254 4254 909	Electrolytic 10μF/16V	CE04W1C100M
C548	254 4260 980	Electrolytic 10μF/50V	CE04W1H100M
C551-554	253 1146 907	Ceramic 0.01μF/50V	CK45FH1H03Z

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUTORS GROUP			
C651	255 1265 949	Film 0.012μF/50V	CO93M1H123(K)
C652	254 4300 963	Electrolytic 100μF/6.3V	CE04W0J101M
C653	253 1181 904	Ceramic 0.01μF/50V	CK45FH1H03Z
OTHERS PARTS GROUP			
CF501,502	261 0064 007	Ceramic Filter	SFT10.7M32
CF503	261 0116 007	Ceramic Filter	SFU45083
CF504	261 0101 009	Ceramic Filter	BFU450C4N
▲ F401	206 1015 005	Fuse 2A	
▲ F402	206 1015 023	Fuse 1A 1.5	Europe Model Only (Except for U.K.)
RL401	214 0176 009	Relay (G5P-1)	Europe Model Only (Except for U.K.)
RM601	499 0150 008	Remote Sensor	SBX1610-52
SW601-615	212 5604 910	Tact Switch	
▲ SW401	212 1030 009	Power Switch	TV-5
T501	231 1913 004	MW Antenna Oscillator Coil	
T502	231 2098 009	FM IF DET Trans	
T503	231 1144 006	AM IFT	
T504	232 9010 009	Antibird Filter	
T505,506	232 0065 004	LPF	
XL502	261 0103 007	Ceramic Oscillator	CSB456F11
XL503	399 0075 003	Crystal	7.2MHz
XL601	399 0191 903	Ceramic Oscillator	CST4.00MGW-TF01
	393 4155 002	FLD	FIP14AM7R
	205 0847 004	3P Antenna Terminal (PAL/F)	
	216 0065 006	Front End	
	205 0624 007	2P AC Connector Base	
CN3D	205 0581 001	2P VH Connector Base	
CN3E	205 0581 056	2P VH Connector Base	Europe Model Only (Except for U.K.)
CN7A	205 0748 077	JL Connector(R)	
CN8A	205 0536 001	8P Connector Socket	
CN27A	205 0880 016	27P FFC Connector Base	
CN3B	203 2361 003	2P SAN PH Connector Cord	
▲ 203 0534 051	203 0534 064	P Connector Ass'y	
▲ 203 0534 064	203 0534 065	P Connector Ass'y	
▲ 203 0514 001	203 0514 002	P+E SAN Connector Cord	
▲ 212 0516 009	212 0516 010	2P VH Connector Cord	
▲ 212 0340 800	212 0340 801	Fuse Clip	
SC471	279 0016 904	Thyristor SP0R1A42	
RESISTORS GROUP			
▲ R207,208	244 2052 931	Metalic 390ohm 1W	RS14B3A391NBS(S)
▲ R265,266	241 2397 940	Carbon 4.7ohm 1W	BD14B2E4RQNBES
▲ H311,312	241 2379 932	Carbon 620ohm 1W	RD14B2E21NBS
▲ R325,330	241 2378 920	Carbon 220ohm 1W	RD14B2E21NBS
▲ R331-334	241 2043 982	Metalic 0.22ohm 1W	RS14B3A22NBS(S)
▲ R343,344	241 2379 987	Carbon 1ohm 1W	RD14B2E12NBS
▲ R345,346	241 2378 962	Carbon 330ohm 1W	RD14B2E31NBS

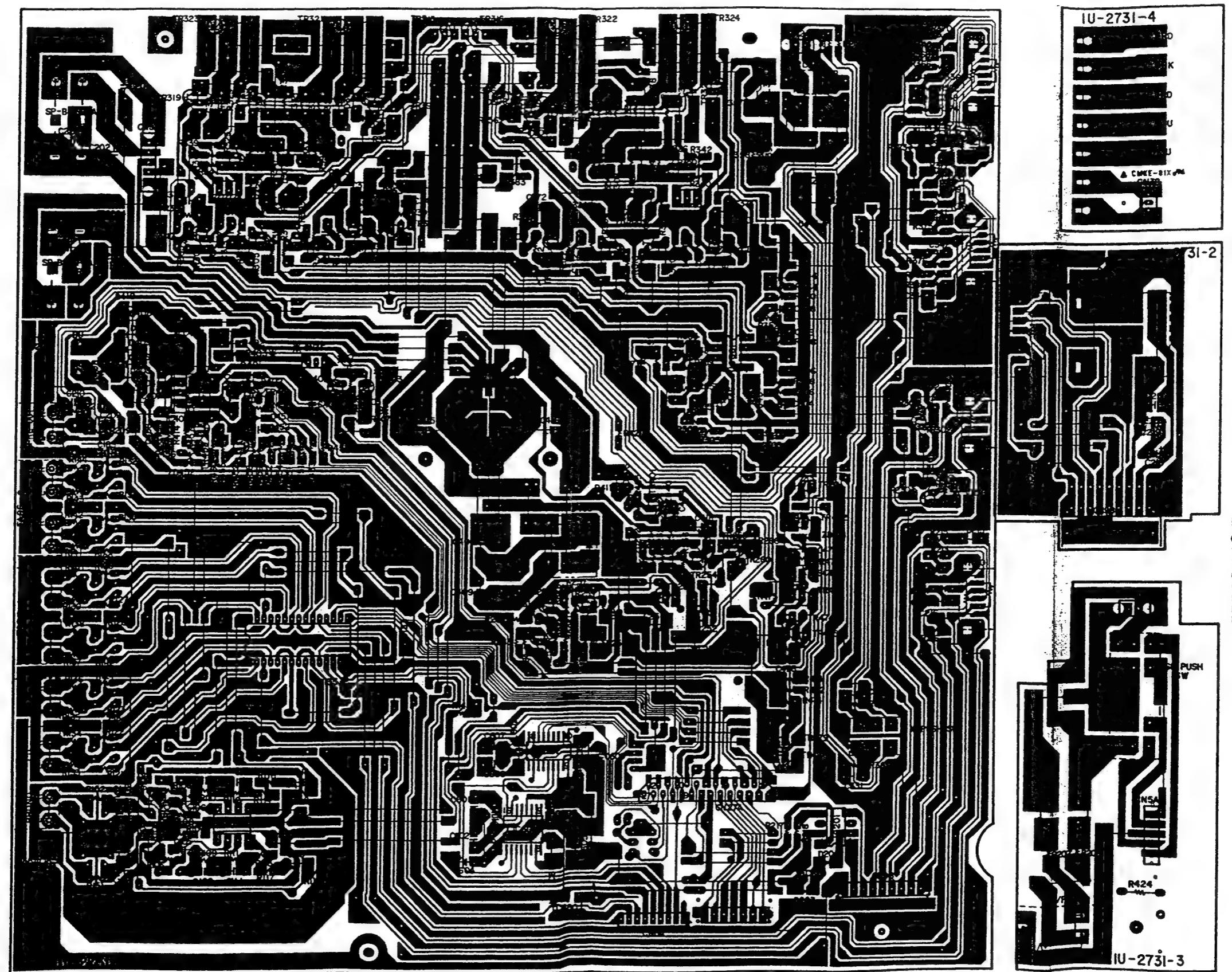
1U-2731 MAIN UNIT (DRA-365RD)

Ref. No.	Part No.	Part Name	Remarks
SEMICONDUTORS GROUP			
IC101	253 0609 002	IC NJM2068DDC	
IC102	262 1227 008	IC L1C7821	
IC201	263 0476 002	IC LB1639	
IC301	263 0565 007	IC BA15218	
IC401	263 0793 002	IC NJM7806G(F)	
IC601	262 1701 906	IC SA4557RT	
IC602	262 1929 908	IC LC7074M-TE-R	
TR201	269 0022 904	Transistor DTA143ES(4.7K-4.7K)	
TR251	274 0151 903	Transistor 2SD2004(P)	
TR252	272 0017 906	Transistor 2SB1385(P)	
TR253	273 0388 906	Transistor 2SC1740S(E)	
TR254	271 0192 905	Transistor 2SA933(S)	
TR255	273 0432 904	Transistor 2SC2385(S/E)	
TR256	271 0280 901	Transistor 2SA1038(S/E)	
TR257	273 0388 906	Transistor 2C1749S(E)	
TR301,302	269 0107 900	Transistor RN1241 (AB)	
TR303-306	271 0619 904	Transistor 2A988(E/F)	
TR309,310	273 0235 923	Transistor 2C1841(E/F)	
TR315,316	273 0198 902	Transistor 2SC1815(Y)	
TR317,318	274 0060 900	Transistor 2SD674(A)TZ	
TR319,320	272 0053 906	Transistor 2SB6474(C)	
TR325,326	273 0235 923	Transistor 2SC1841(E/F)	
TR327	271 0131 924	Transistor 2SA988(E/F)	
TR401	272 0131 901	Transistor 2SB1041(R)	
TR451	273 0388 906	Transistor 2C1740S(E)	
TR45			

PRINTED WIRING BOARD PATTERNS

1 2 3 4 5 6 7 8

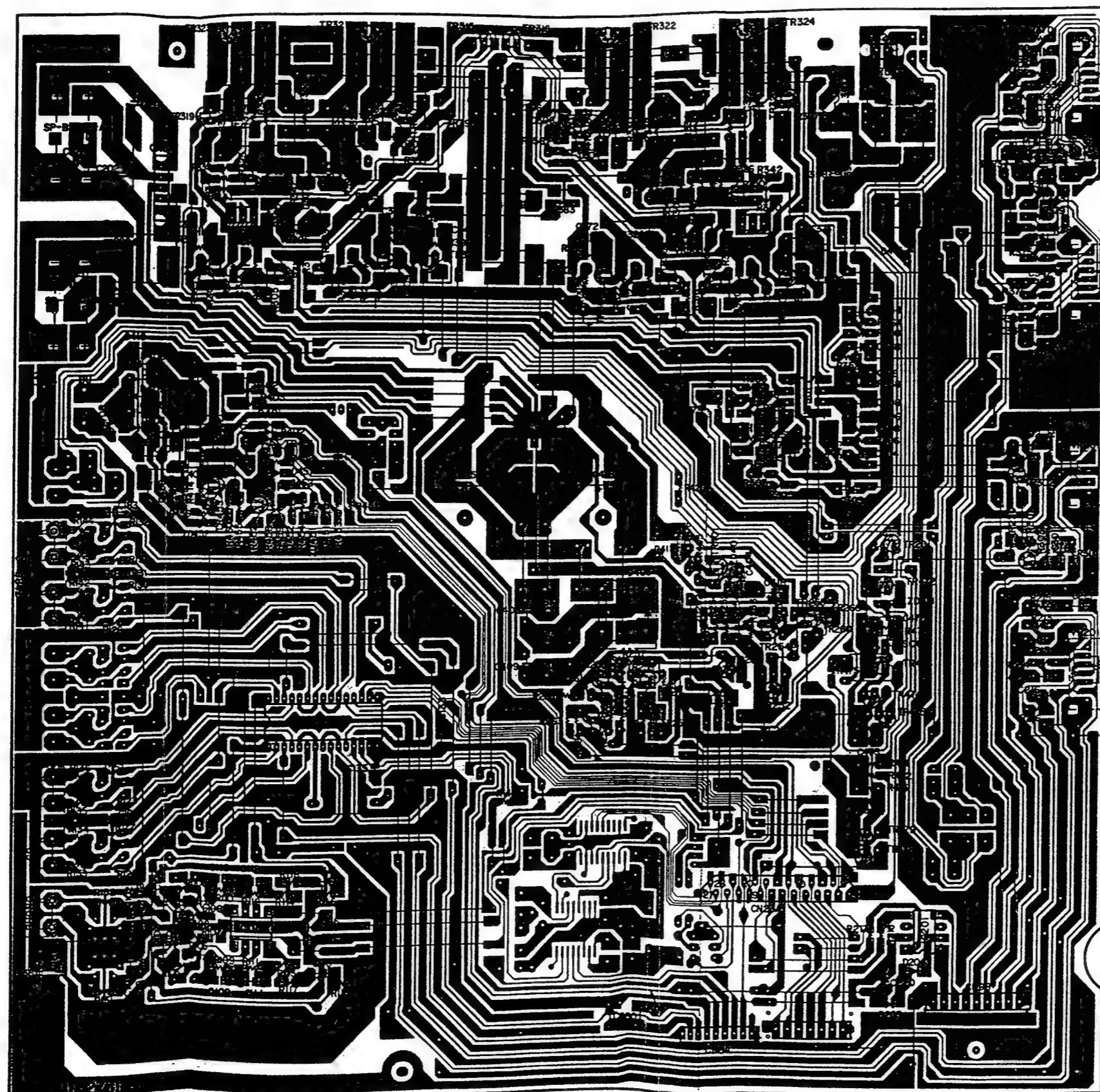
1U-2731B MAIN UNIT (DRA-565RD)



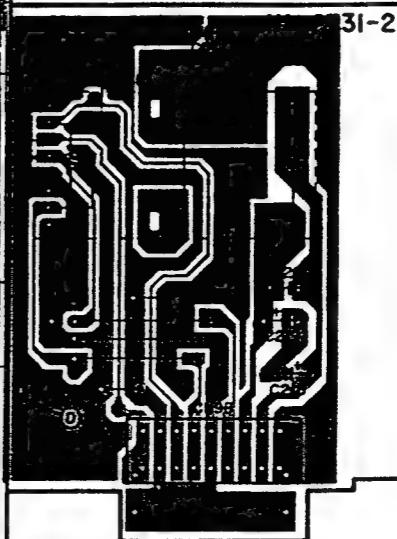
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1U-2731 MAIN UNIT (DRA-365RD)

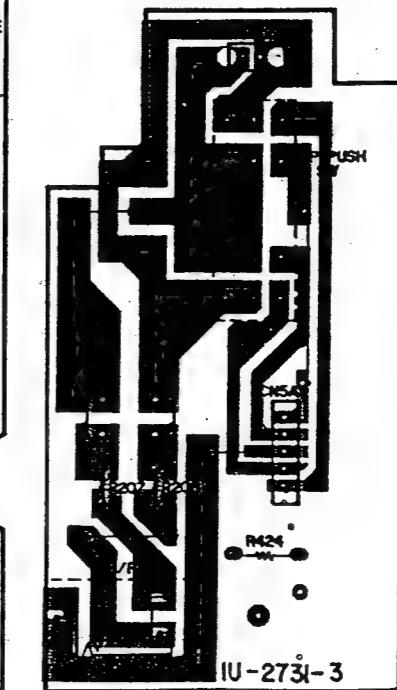
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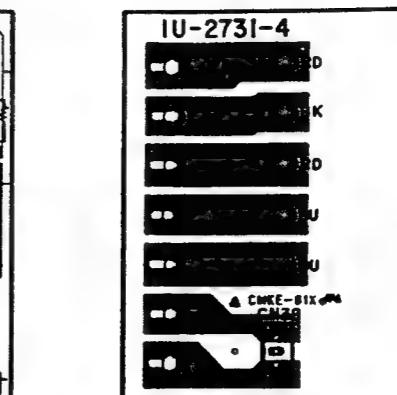
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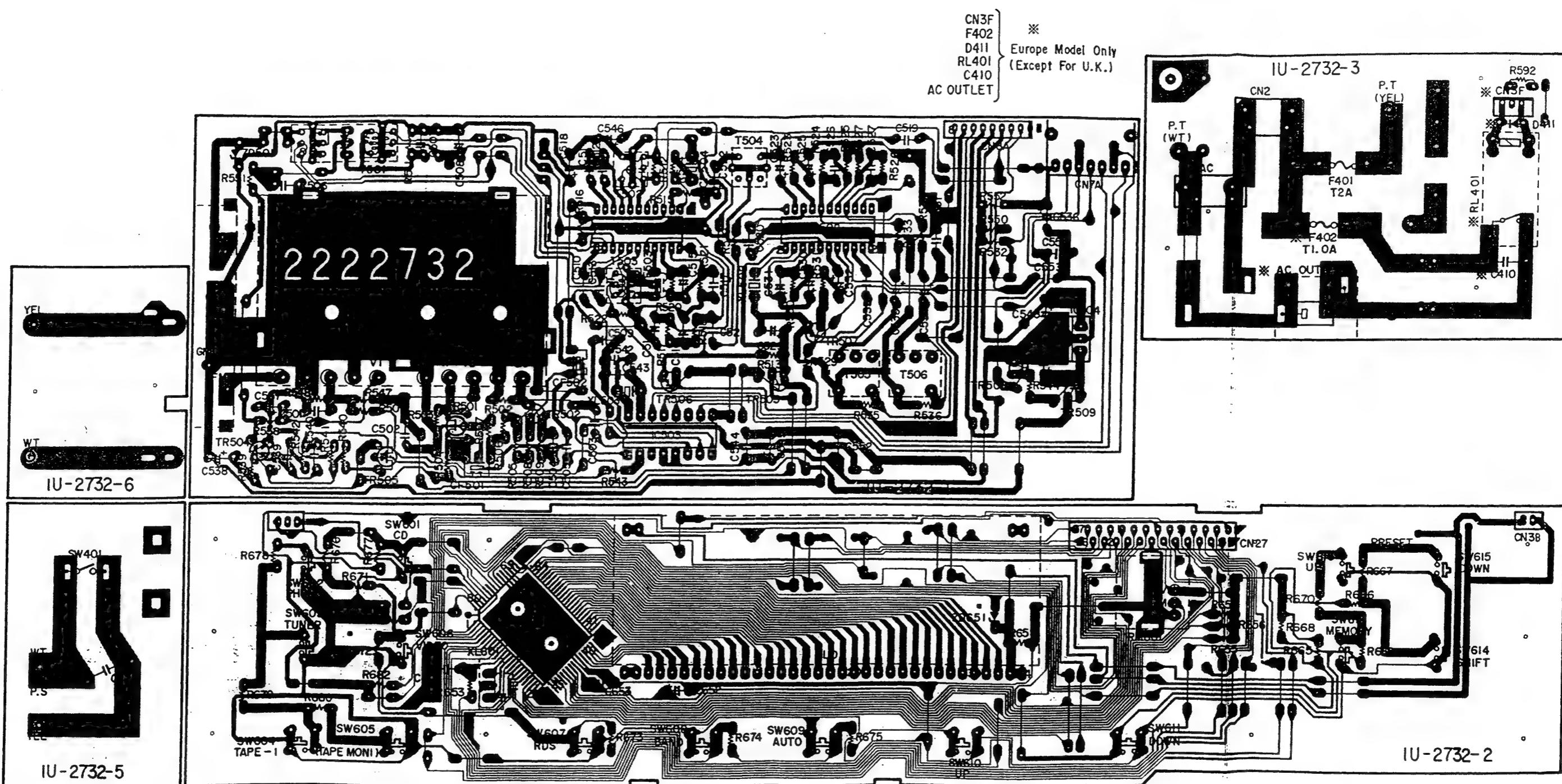
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1U-2732B TUNER & DISPLAY (DRA-565RD)

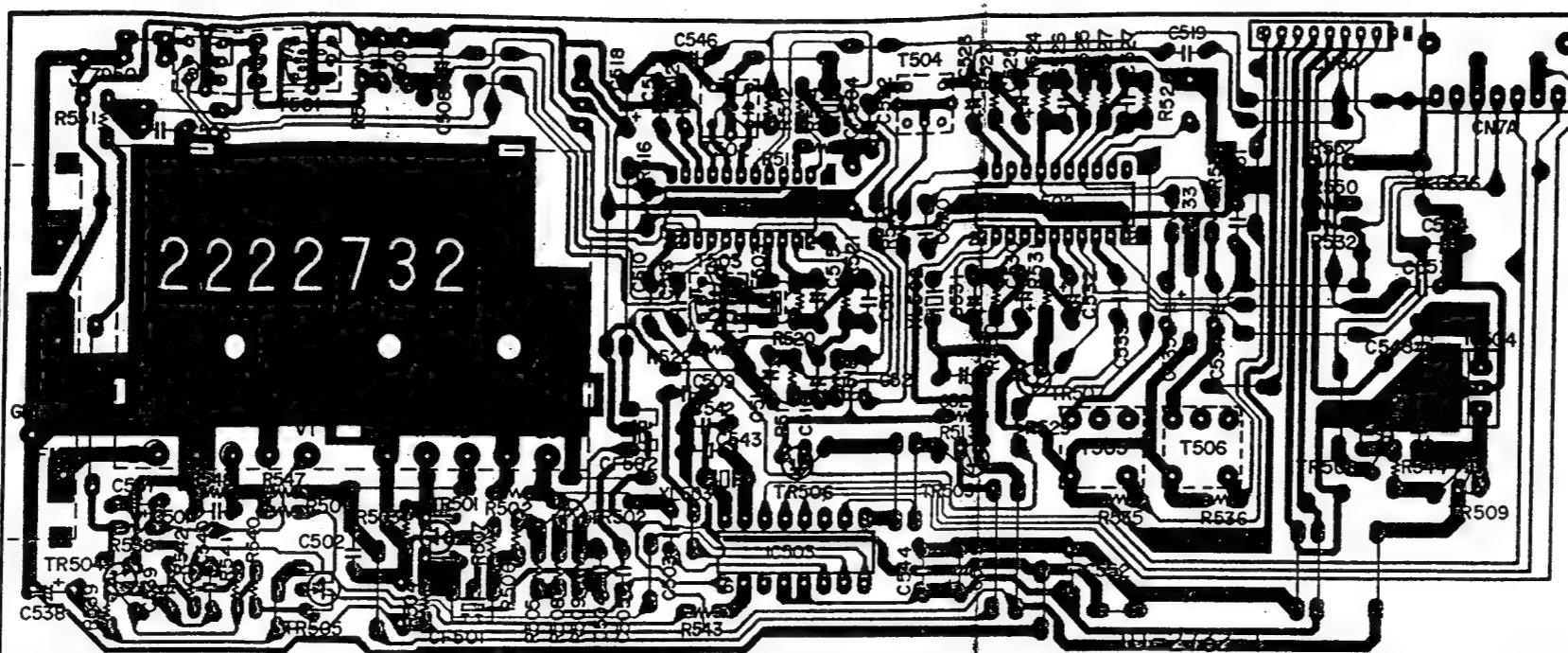


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1U-2732 TUNER & DISPLAY UNIT (DRA-365RD)

* F402 } Europe Model Only
AC OUTLET } (Except For U.K.)

A



WIRING DIAGRAM

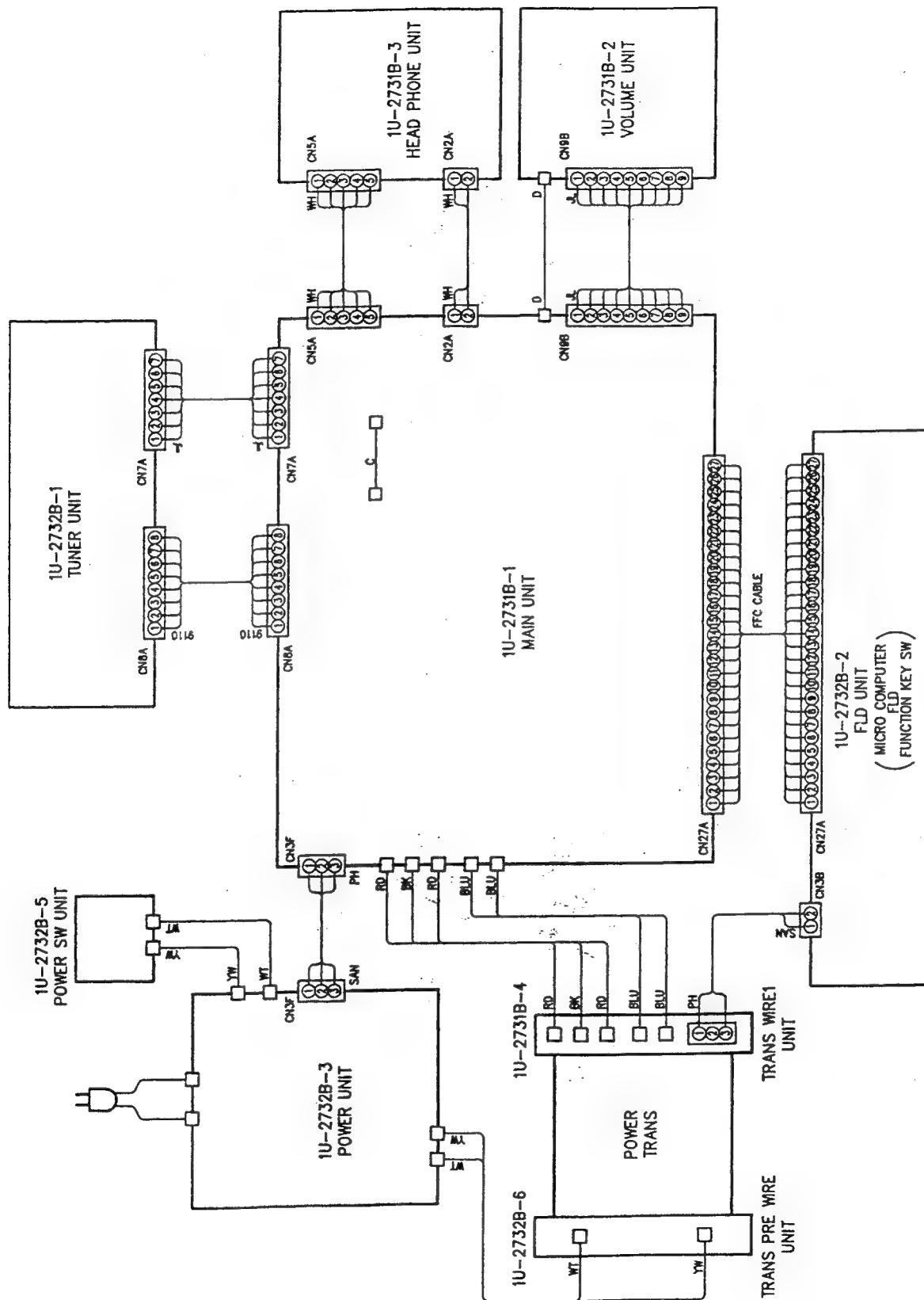
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DRA-565RD



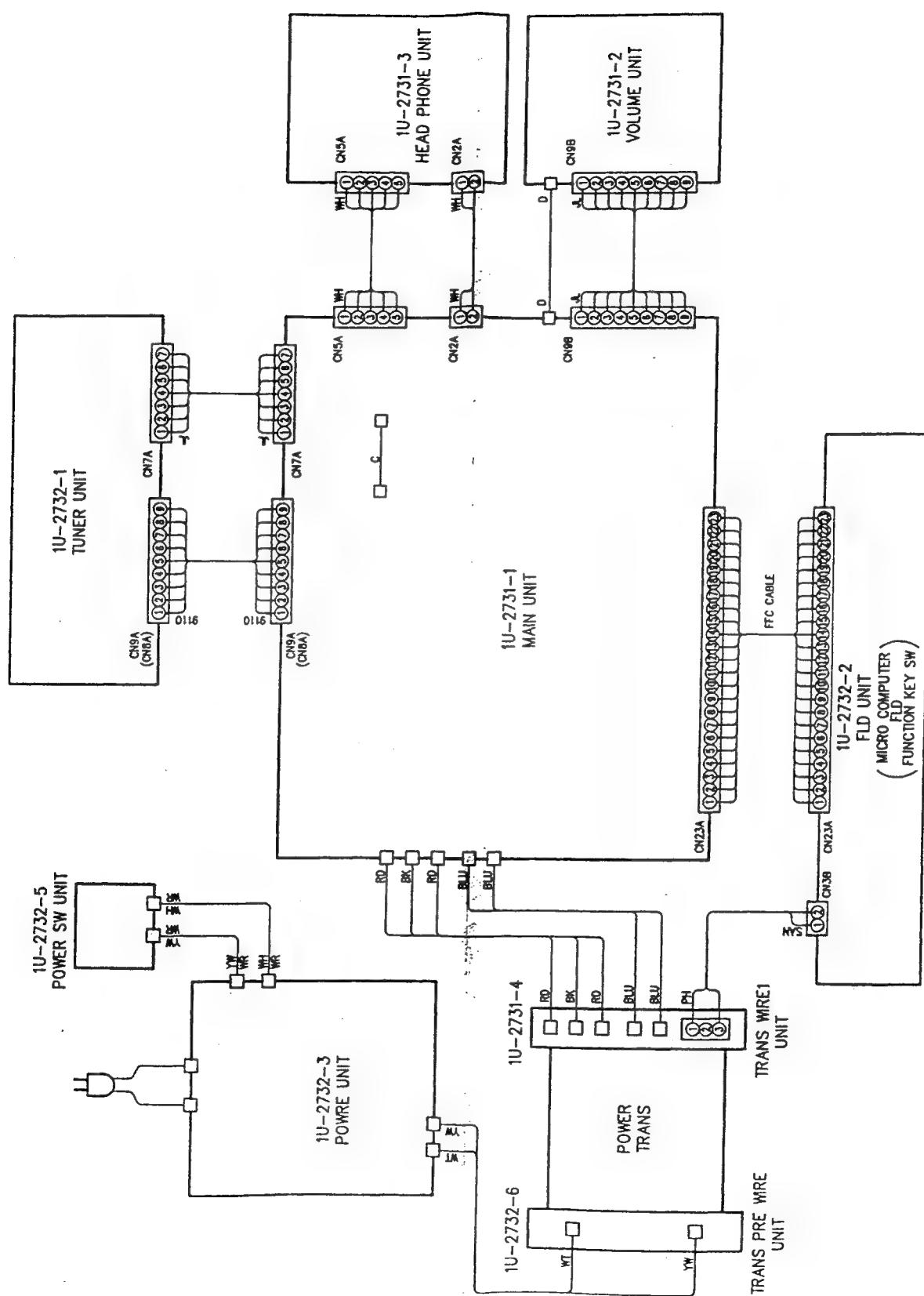
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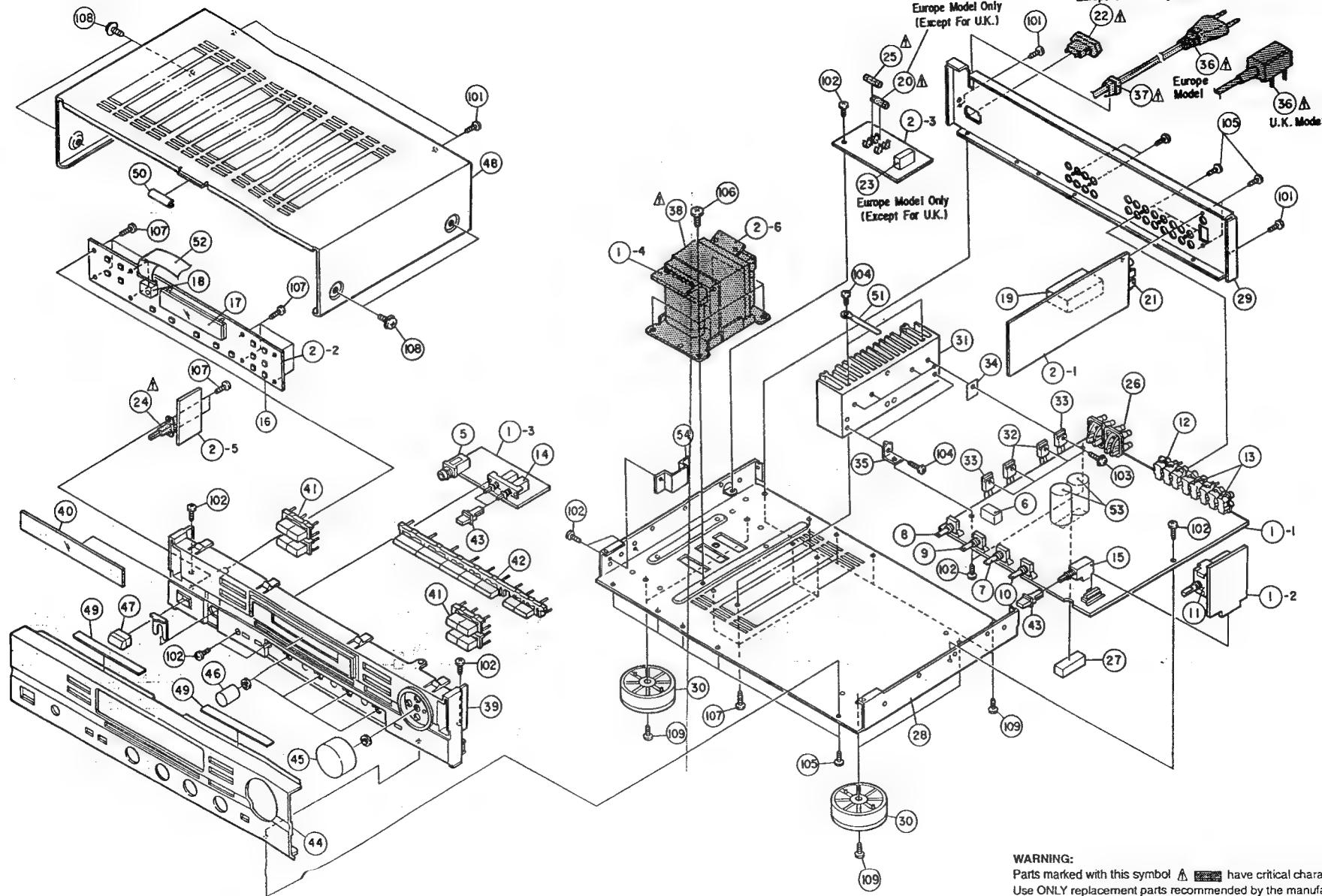
DRA-365RD



EXPLODED VIEW OF CHASSIS AND CABINET

1 2 3 4 5 6 7 8

DRA-565RD



PARTS LIST EXPLODED VIEW (DRA-565RD)

Ref. No.	Part No.	Part Name	Remarks	Q'ty	Ref. No.	Part No.	Part Name	Remarks	Q'ty
① 1	1U-2731 B	MAIN UNIT ASSY		1	④ 48	102 0520 129	TOP COVER		1
1-1	—	MAIN UNIT			④ 49	461 0769 009	RUBBER SHEET		2
1-2	—	VOLUME UNIT			④ 50	122 0146 015	HIMERON SHEET		1
1-3	—	HEAD PHONE UNIT			④ 51	445 0048 003	CORD HOLDER (L=75)		2
1-4	—	TRANS WIRE 1 UNIT			④ 52	009 0112 005	27P FFC CORD		1
② 2	1U-2732 B	TUNER/DISPLAY UNIT ASSY		1	④ 53	254 4374 708	ELECTROLYTIC 8200μF/56V		1
2-1	—	TUNER UNIT			④ 54	412 2965 107	SIDE BRACKET		1
2-2	—	DISPLAY UNIT							
2-3	—	POWER UNIT							
2-5	—	POWER SW UNIT							
2-6	—	TRANS PRE WIRE UNIT							
5	204 8354 004	HEAD PHONE JACK		1					
6	214 9003 005	RELAY	RL471	1					
7	211 0827 003	VARIABLE	VR251	2					
8	211 0828 002	VARIABLE	VR301	1					
9	211 0829 001	VARIABLE	VR303	1					
10	211 0830 003	VARIABLE	VR201	1					
11	211 0831 002	VARIABLE	VR102	1					
12	204 8466 002	4 PIN JACK		1					
13	204 8467 001	6P PIN JACK		2					
14	212 4778 009	2P PUSH SWITCH		1					
15	212 1074 007	1P PUSH SWITCH	SW601-615	1					
16	212 5604 910	TACT SWITCH		15					
17	393 4155 002	FLD	RIP14AM7R	1					
18	499 0150 006	REMOTE SENSOR	SBX1610-52	1					
19	218 0065 006	FRONT END		1					
△ 20	205 1015 029	FUSE 1A	F402 Europe Model Only (Except for U.K.)	1					
21	205 0847 004	3P ANTENNA TERMINAL		1					
△ 22	203 2942 007	AC OUTLET	Europe Model Only (Except for U.K.)	1					
23	214 0176 009	RELAY(GSP-1)	RL401 Europe Model (Except for U.K.)	1					
△ 24	212 1030 009	POWER SWITCH(ONY)		1					
△ 25	206 1015 081	FUSE 2A	F401 Europe Model Only (Except for U.K.)	1					
26	205 0484 001	8P SPEAKER TERMINAL	Europe Model	1					
	205 0472 013	8P SPEAKER TERMINAL	U.K. Model	1					
● 27	461 0539 022	RUBBER SHEET		1					
● 28	411 1236 006	MAIN CHASSIS		1					
● 29	105 1136 029	REAR PANEL	Europe Model	1					
● 30	104 0194 108	REAR PANEL	U.K. Model	1					
31	417 0498 205	FOOT ASSY		4					
32	273 0388 002	POWER RADIATOR		1					
33	271 0240 006	TRANSISTOR	TR321,322	2					
34	415 0234 007	TRANSISTOR	TR323,324	2					
● 35	412 3767 006	INSULATING SHEET		4					
		P.W.B. BRACKET		2					
△ 36	205 2981 000	AC CORD WITH CONNECTOR	Europe Model	1					
	206 2109 002	AC CORD WITH CONNECTOR	U.K. Model	1					
△ 37	445 0056 008	CORD BUSH		1					
△ 38	233 6116 006	POWER TRANS		1					
● 39	146 1495 127	INNER PANEL		1					
● 40	143 0680 006	WINDOW		1					
41	113 1679 008	BUTTON(4KEY)		2					
42	113 1680 107	BUTTON(7KEY)		1					
43	113 1558 006	PUSH BUTTON(KAKU)		3					
● 44	144 2370 119	FRONT PANEL		1					
45	112 0647 009	VOLUME KNOB		1					
46	112 0739 001	KNOB(MARU)		4					
47	113 9213 000	POWER BUTTON ASSY		1					

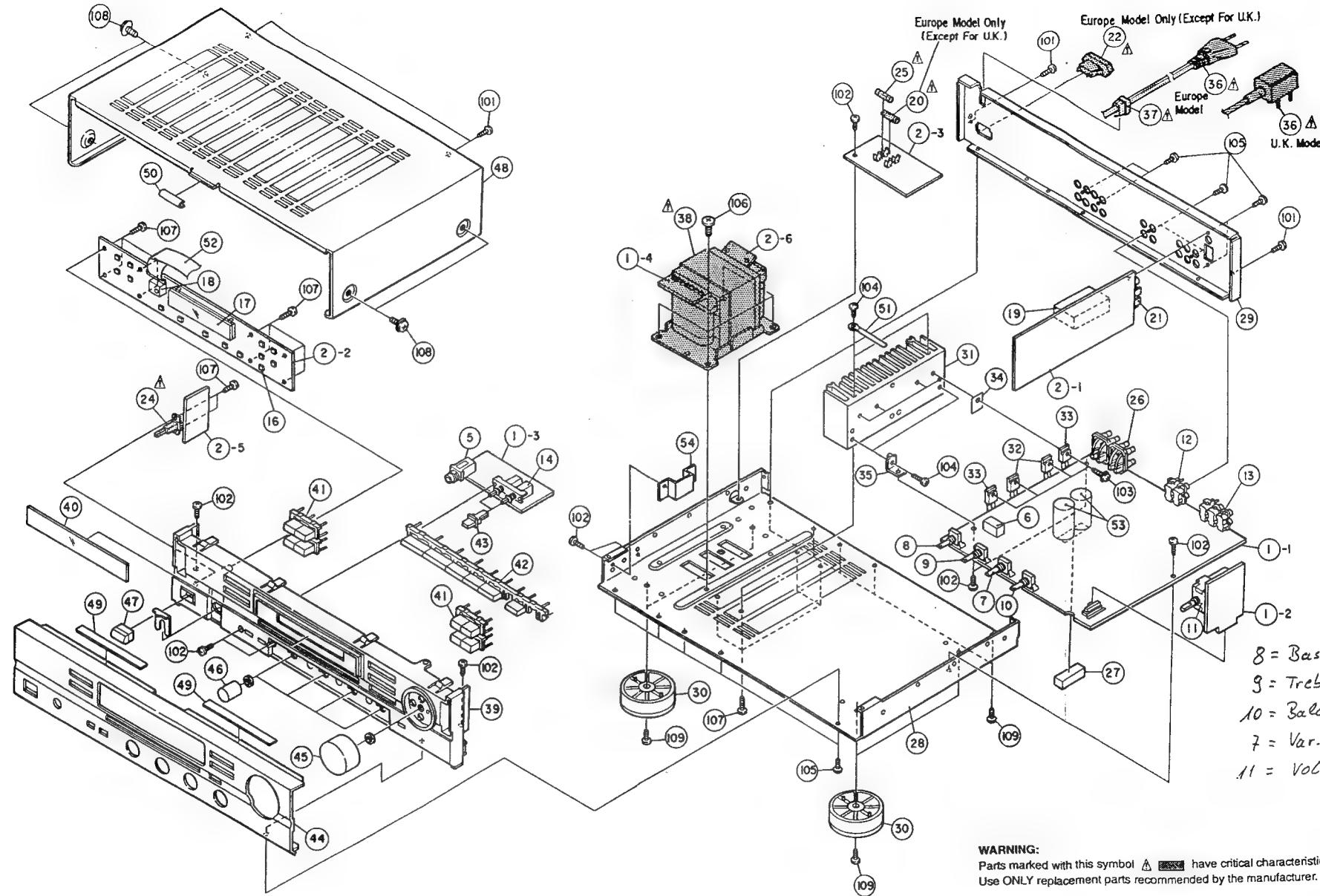
PARTS LIST EXPLODED VIEW (DRA-365RD)

Ref. No.	Part No.	Part Name	Remarks	Q'ty	Ref. No.	Part No.	Part Name	Remarks	Q'ty
① 1	1U-2731	MAIN UNIT ASSY		1	④ 50	122 0146 015	HIMERON SHEET		1
1-1	--	MAIN UNIT			④ 51	445 0048 003	CORD HOLDER (L=76)		1
1-2	--	VOLUME UNIT			④ 52	009 0112 005	2TP FFC CORD		1
1-3	--	HEADPHONE UNIT			④ 53	254 4355 002	ELECTROLYTIC 6800μF/50V		2
1-4	--	TRANS WIRE 1 UNIT			④ 54	412 2955 107	SIDE BRACKET		1
② 2	1U-2732	TUNER/DISPLAY UNIT ASSY		1	SCREWS				
2-1	--	TUNER UNIT			101	473 7015 018	TAPING SCREW 3x8 (S)	Black	4
2-2	--	DISPLAY UNIT			102	473 7002 018	TAPING SCREW 3x8 (S)	Black	10
2-3	--	POWER SW UNIT			103	473 8007 009	CUP SCREW 3x12		4
2-5	--	POWER SW UNIT			104	473 7501 001	TAPING SCREW 3x10 (P)		2
2-6	--	TRANS PRE WIRE UNIT			105	477 0064 107	FIXING SCREW 3x10	Black	10
5	204 8354 004	HEADPHONE JACK		1	106	473 7004 018	TAPING SCREW 4x6 (S)	Black	4
6	214 9003 005	RELAY	RL471	1	107	473 7508 017	TAPING SCREW 3x10 (P)	Black	14
7	211 0827 003	VARIABLE Var. Loud.	VR251	2	108	477 0263 005	3P SWELLING SCREW	Black	4
8	211 0828 002	VARIABLE Bass	VR301	1	109	473 7002 005	TAPING SCREW 3x8 (S)		9
9	211 0829 001	VARIABLE Treble	VR303	1	PACKING AND ACCESSORIES (not included EXPLODED view)				
10	211 0830 003	VARIABLE Balance	VR201	1	④ 505 0125 009	POLY COVER			1
11	211 0831 002	VARIABLE Volume	VR102	1	④ 511 2637 007	OPERATING INSTRUCTION			1
12	204 8464 002	4P PIN JACK		1	231 1914 003	AM LOOP ANTENNA			1
13	204 8467 001	6P PIN JACK		2	395 0023 008	FM ANTENNA ASSY			1
14	212 4778 009	2P PUSH SWITCH		1	399 0242 001	REMOTE CONTROL UNIT	RC-174		1
15	--	--		1	④ 505 0131 050	CABINET COVER			1
16	212 5504 910	TACT SWITCH		14	④ 504 0125 005	STYRENE PAPER	For AC CORD		1
17	383 4155 002	FLD	FIP14AM7R	1	④ 503 0939 007	CUSHION			2
18	499 0150 008	REMOTE SENSOR	SBX1610-52	1	④ 502 0741 056	PAD	U.K. Model Only		1
19	216 0065 006	FRONT END		1	④ 501 1782 011	CARTON CASE	Europe Model		1
△ 20	205 0675 024	ROSE ALUMINUM	R02	1	④ 501 1782 024	CARTON CASE	U.K. Model		1
			Europe Model Only (Except for U.K.)						
△ 21	205 0647 004	3P ANTENNA TERMINAL		1					
△ 22	203 8942 007	AC OUTLET		1					
			Europe Model Only (Except for U.K.)						
△ 23	--	--		1					
△ 24	212 0330 009	POWER SWITCH (TV-5)		1					
△ 25	208 3015 016	FUSE 1.25A	F401	1					
26	205 0484 001	8P SPEAKER TERMINAL	Europe Model	1					
	205 0472 013	8P SPEAKER TERMINAL	U.K. Model	1					
④ 27	461 0539 022	RUBBER SHEET		1					
④ 28	411 1255 006	MAIN CHASSIS		1					
④ 29	105 1135 020	REAR PANEL	Europe Model	1					
④ 30	105 1136 033	REAR PANEL	U.K. Model	1					
④ 31	104 1914 108	FOOT ASSY		4					
④ 32	417 0486 218	POWER RADIATOR		1					
④ 33	273 0386 005	TRANSISTOR	TR321,322	2					
④ 34	271 0237 006	2SC3854(Q/PY)(Z)		2					
④ 35	415 0234 007	2SA1490(X/PY)(Z)		2					
④ 36	412 3767 006	INSULATING SHEET		4					
④ 37	142 0680 005	P.W.B. BRACKET		2					
△ 38	206 2091 000	AC CORD WITH CONNECTOR	Europe Model	1					
△ 39	206 2109 002	AC CORD WITH CONNECTOR	U.K. Model	1					
△ 40	445 0056 008	CORD PLUG		1					
△ 41	233 6115 007	POWER TRANS		1					
④ 42	146 1493 129	INNER PANEL		1					
④ 43	143 0680 006	WINDOW		1					
④ 44	113 1679 003	BUTTON(4KEY)		2					
④ 45	113 1680 110	BUTTON(6KEY)		1					
④ 46	112 0647 006	--		3					
④ 47	112 0739 001	FRONT PANEL		1					
④ 48	113 9213 000	VOLUME KNOB		1					
④ 49	102 0426 223	KNOB(WAVU)		4					
④ 50	102 0426 223	POWER BUTTON ASSY		1					
④ 51	461 0769 009	TOP COVER		1					
④ 52	461 0769 009	RUBBER SHEET		2					

EXPLODED VIEW OF CHASSIS AND CABINET

1 2 3 4 5 6 7 8

DRA-365RD



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SCHEMATIC DIAGRAM (for DRA-565RD)

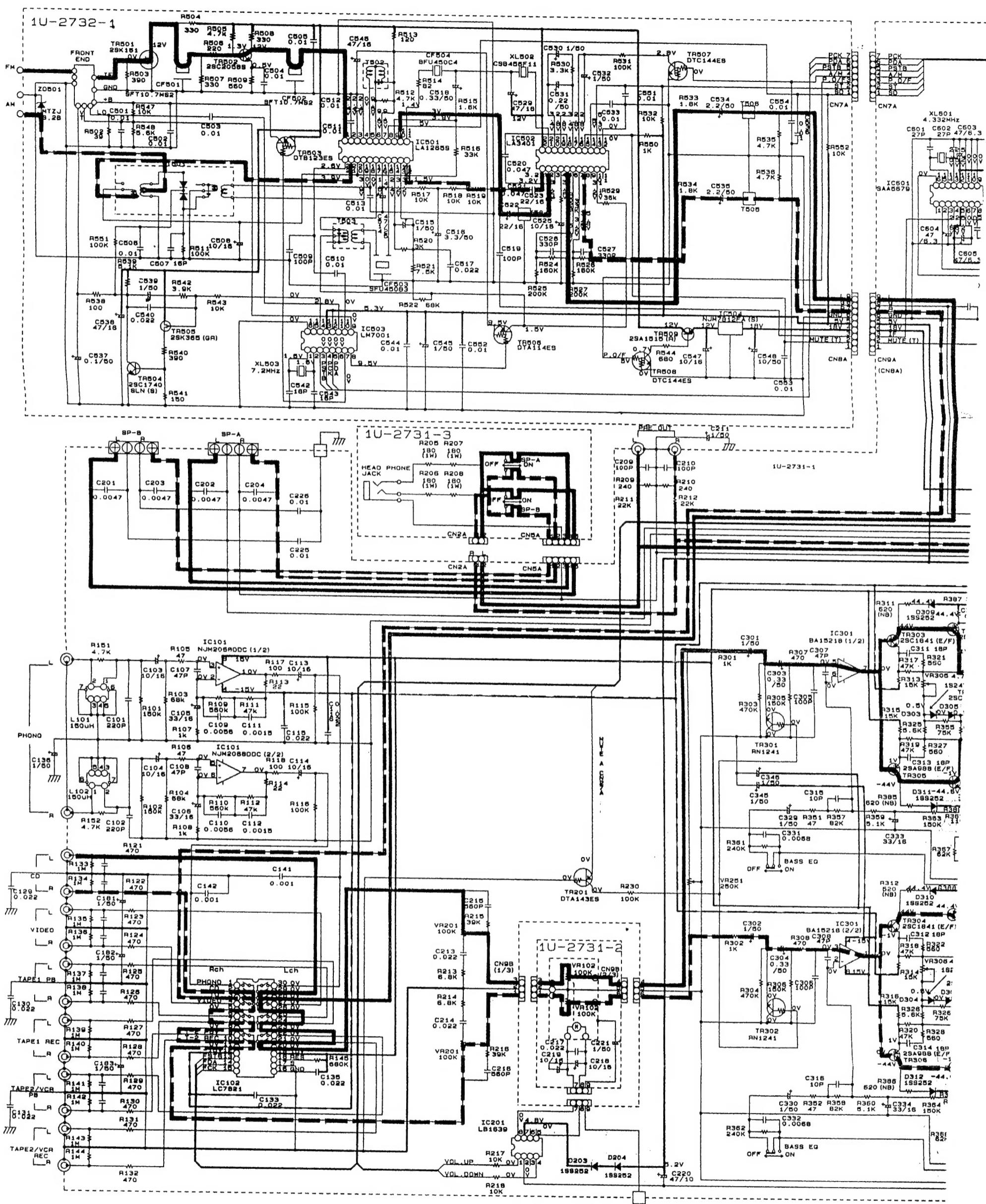
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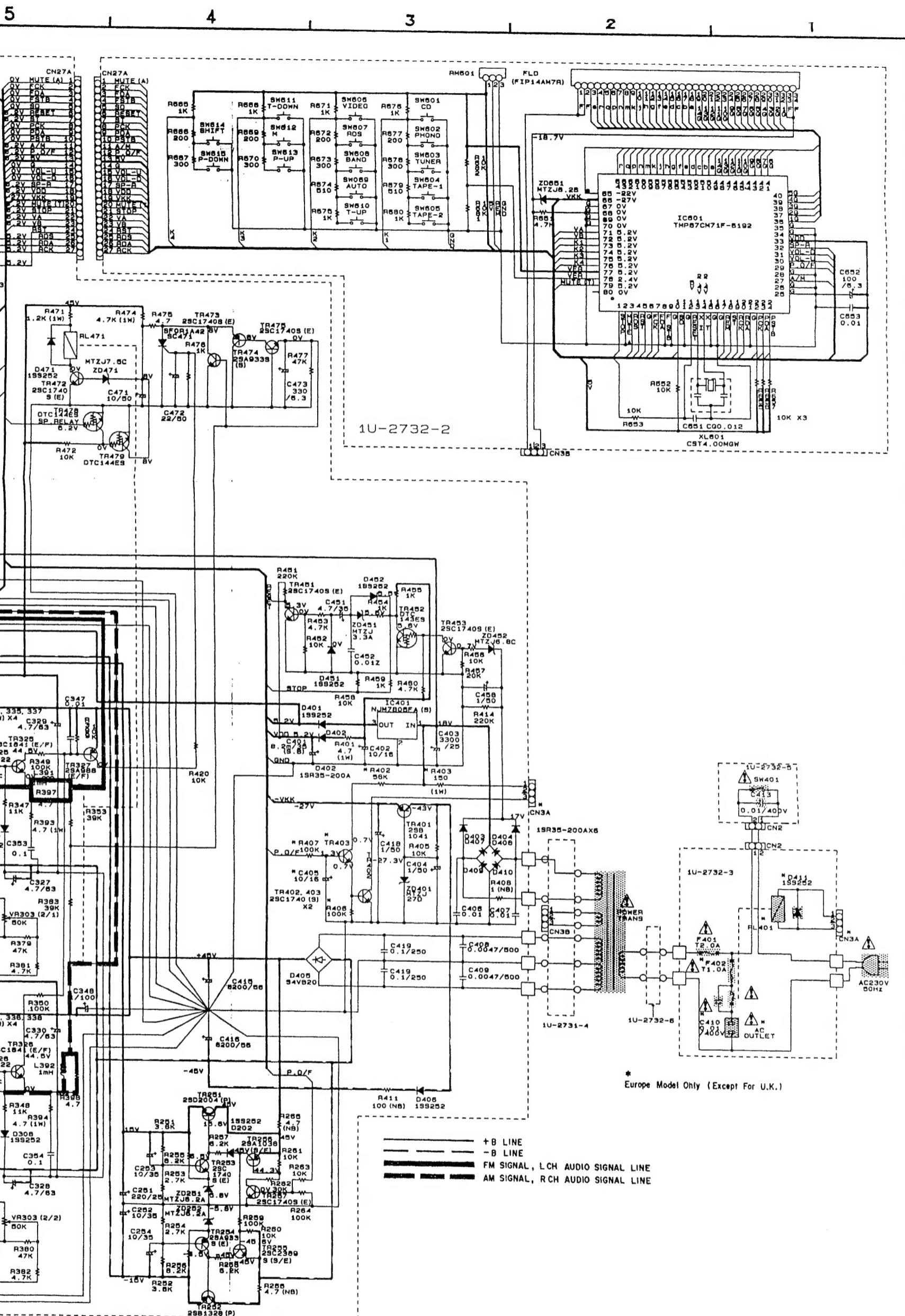


WARNING:
Parts marked with this symbol have critical characteristics.
Use ONLY replacement parts recommended by the manufacturer.

CAUTION:
Before returning the unit to the customer, make sure you make either (leakage current exceeds 0.5 millamps, or if the resistance from chassis

WARNING:
DO NOT return the unit to the customer until the problem is located and
NOTES:
Circuit and parts are subject to change without prior notice.

DENO-0199 / DRUCK17

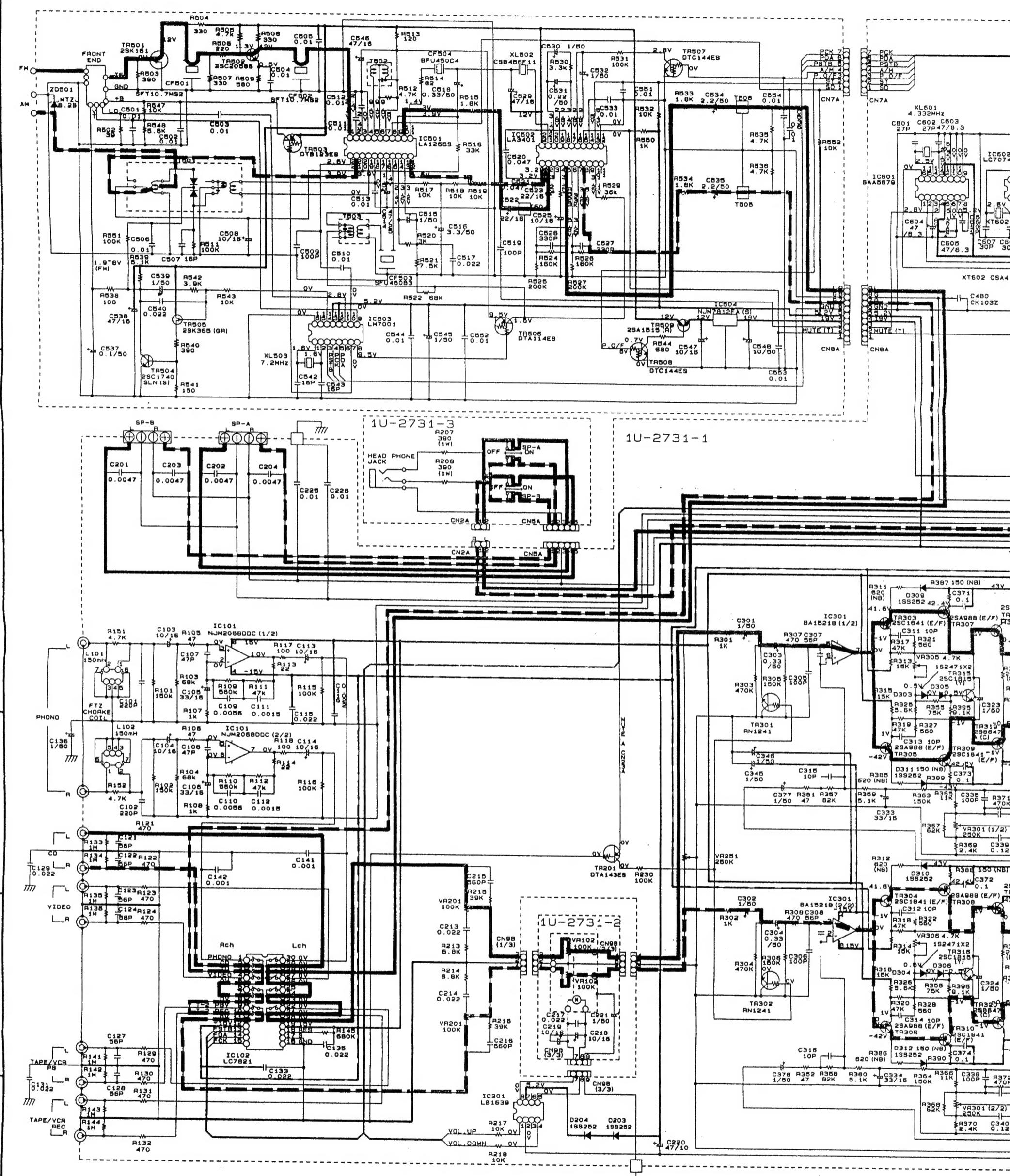


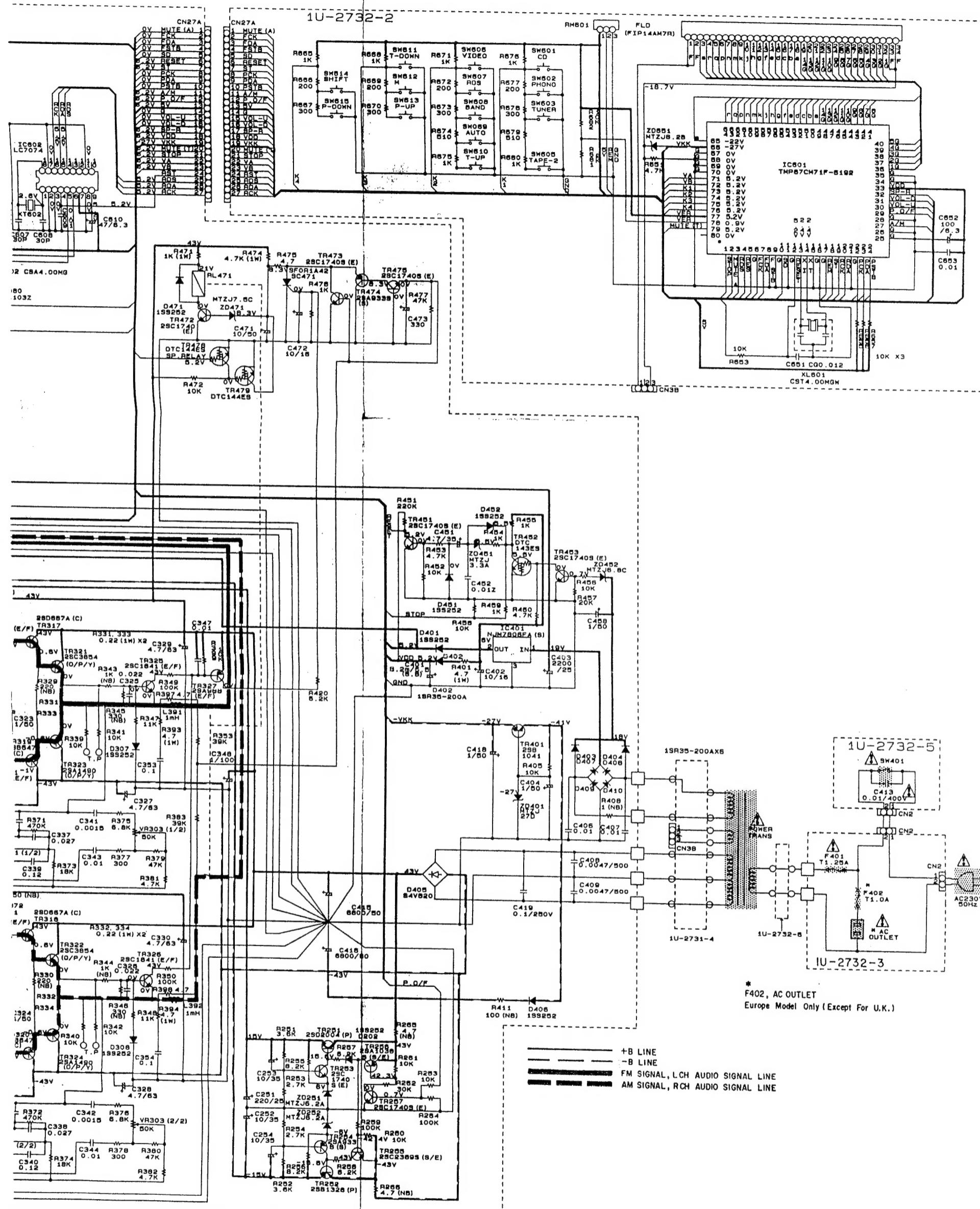
If (1) a leakage current check or (2) a line to chassis resistance check. If the resistance to either side of the power cord is less than 240 kohms, the unit is defective.

and corrected.

SCHEMATIC DIAGRAM (for DRA-365RD)

1 2 3 4 5





tical characteristics.
the manufacturer.

Are you make either (1) a leakage current check or (2) a line to chassis resistance check. If the resistance from chassis to either side of the power cord is less than 240 kohms, the unit is defective.

problem is located and corrected.

out prior notice.